

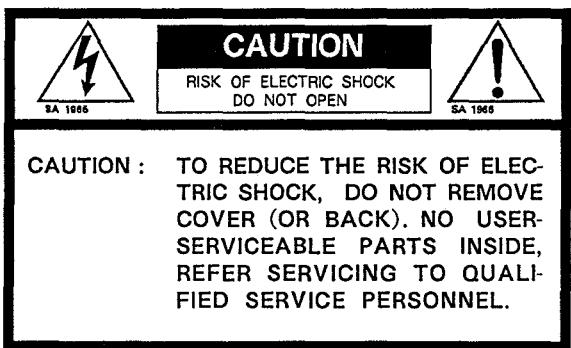
MODEL

**TM14-17R
TM20-17R**

COLOR MONITOR

SERVICE MANUAL
(FOR FIELD ENGINEER)

Ikegami



CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the equipment.

WARNING: FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS (REFER TO SERVICE LITERATURE).

AVIS: POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÉCURITÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT (CONSULTER LE GUIDE DÉ DÉPANNAGE).

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR WATER.

IMPORTANT SAFETY INSTRUCTION

1. General

- ① Read all of these instructions.
- ② Save these instructions for later use.
- ③ Follow all warnings and instructions marked on the television equipment.
- ④ Never push objects of any kind into this television monitor through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
Never spill liquid of any kind on the television monitor.
- ⑤ Do not attempt to service this television monitor yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- ⑥ Do not use attachments not recommended by the television equipment manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
- ⑦ This television monitor has been preadjusted to meet the respective broadcasting standard signals. So, it cannot be used with the signals of different broadcasting standards.
- ⑧ When keeping or transporting the unit for a long time, pack it in the supplied carton or equivalent.
- ⑨ This monitor is heavy.
When taking out of or putting it into a carton box, or setting, do not move or carry it by a person.
You may drop it on your foot, or hurt your waist.



2. Power supply

- ① This television equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your television dealer or local power company.
- ② This television equipment is provided with a three-wire grounding type plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet.
Do not defeat the safety purpose of the grounding-type plug.

- ③ When connecting and disconnecting the power cable, be sure to hold the plug.
- ④ Do not allow anything to rest on the power cord. Do not locate this television equipment where the cord will be abused by persons walking on it.
- ⑤ For added protection for this television equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet.
This will prevent damage to the equipment due to lightning and power-line surges.
- ⑥ Do not overload wall outlets and extension cords as this can result in fire or electric shock.

3. Usage and Location

- ① Do not use this television equipment near water — for example, near a bath tub, wash-bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, or the like.
- ② Do not place this television equipment on an unstable cart, stand, or table. The television equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Use only with a cart or stand recommended by the manufacturer, or sold with the television equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
Television equipment and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.



- ③ Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the monitor and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the television equipment on a bed, sofa, rug, or other similar surface. (This television equipment should never be placed near or over a radiator or heat register.)
This television equipment monitor should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

- ④ Avoid operating or placing (keeping) in hot (+40 °C or over) and cold (less than 0 °C), excessively vioratory, or dusty place.
And avoid operating or placing (keeping) in the places exposed to the direct sunlight. Otherwise the cabinet may deform or the phosphor of the CRT surface may deteriorate.
- ⑤ If an image of extremely high brightness is displayed on the screen for a long time, the CRT may be cause burning.

4. Cleaning

- ① Unplug this television equipment from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- ② Do not use thinner or benzine for cleaning. Otherwise, the cabinet may deform or the paint may peel away.

5. Repair

- ① Unplug this television monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the television monitor.

- c. If the television monitor has been exposed to rain or water.
 - d. If the television monitor does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the television monitor to normal operation.
 - e. If the television monitor has been dropped or the cabinet has been damaged.
 - f. When the monitor exhibits a distinct change in performance — this indicates a need for service.
- ② When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.
 - ③ Upon completion of any service or repairs to this monitor, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.
 - ④ For repair service, contact Ikegami's authorized sales representative or Ikegami service window directly.

SAFETY PRECAUTIONS

1. Comply with caution and safety related notes located on the shield case in the receiver.

2. WARNING

Any alteration should not be made in the design or circuitry of this receiver.

Any design alterations or additions may alter the safety characteristic of this receiver and potentially create a hazardous situation for the user.

Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

3. CRT

The picture tube in this receiver employs integral implosion protection. Replace with a tube of the same type number for continued safety.

4. X-RADIATION AND HIGH VOLTAGE LIMITS

The primary source of potential X-radiation in solid state receivers is the picture tube.

The picture tube is specially constructed to prohibit X-radiation emissions. For continued X-radiation protection, the replacement tube must be the same type as the original.

The shields and mounting hardware for picture tubes have an X-radiation protection function and must be properly in place.

High voltage must be checked each time any service is required that involves B+, horizontal deflection or high voltage.

Where used, X-radiation protection circuits must be checked for proper operation each time the X-radiation protection circuit is serviced.

Refer to the warning label on the shield case in the receiver and the schematic in the manual and, where used, X-radiation protection circuits specifications.

High voltage is maintained within specified limits by the use of close tolerance safety related components /adjustments in the high voltage circuit. If high voltage exceeds specified limits, check each component specified on the schematic diagram and take necessary corrective action.

5. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in receiver sets have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual.

Electrical components having such features are identified by (*) on the parts list and the schematic diagram in this manual.

The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in this manual may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time.

For the latest information always consult the current **Ikegami** Service Data. A subscription to, or additional copies of, **Ikegami** Service Data may be obtained at a nominal charge from **NY-Ikegami**.

MODEL

TM14-17R

TM20-17R

COLOR MONITOR

SERVICE MANUAL

Contents

	Page
1. MAINTENANCE and ADJUSTMENT	1
1-1. MAIN CHASSIS	1
(1) Purity Adjustment	1
(2) Convergence Adjustment	1
(3) Replacement of CRT	2
(4) Adjustment after CRT Replacement	3
1-2 ADJUSTMENT PROCEDURE for VIDEO BOARD	5
(1) Items Checked	5
(2) Operation	5
(3) Waveform Check (Pulse system)	5
(4) Adjustments of Deflection System	6
(5) Adjustments of VIDEO System-Level Adjustment of LUMINANCE Signal	6
(6) Adjustments of VIDEO System-Level Adjustment of CHROMINANCE Signal	8
(7) Adjustments of VIDEO System-Level Adjustment of YPBPR Input	9
(8) Adjustments of VIDEO System-Frequency Characteristic Check	10
1-3. ADJUSTMENT PROCEDURE for DEF & POWER BOARD	11
(1) Items Checked	11
(2) Operation	11
(3) Adjustment for Prevention of X-rays Radiation	11
(4) Adjustments of High Voltage Regulator	12
(5) Adjustments of Scanning Size, etc.	12
(6) Adjustments of SCREEN VR(Reference Channel Decision) and FOCUS VR	13
2. PARTS LOCATION	
• VIDEO BOARD Parts Location	PC36M1D
• VR BOARD Parts Location	PC36M2D
• 14" FRONT LEFT BOARD Parts Location	PC36M3D
• DEF & POWER BOARD Parts Location	P-70506B

	Page
• 14" FRONT RIGHT BOARD Parts Location	P-70507B
• 14" CRT SOCKET BOARD Parts Location	P-70511A
• 20" FRONT PANEL BOARD Parts Location	P-70518A
• 20" CRT SOCKET BOARD Parts Location	P-70515
• 20" LED BOARD Parts Location	P-70516

3. SCHEMATIC DIAGRAM

• BLOCK DIAGRAM	C 3-904533
• VIDEO BOARD Schematic Diagram(1/3)	C11-904441B
• VIDEO BOARD Schematic Diagram(2/3)	C11-904442C
• VIDEO BOARD Schematic Diagram(3/3)	C 3-904443B
• DEF & POWER BOARD Schematic Diagram	C11-904448B
• 14" FRONT RIGHT BOARD /VR BOARD Schematic Diagram	C 3-904462A
• 14" MAIN CHASSIS Schematic Diagram (with 14" FRONT LEFT BOARD & 14"CRT SOCKET BOARD)	C11-904464A
• 20" FRONT PANEL BOARD/VR BOARD Schematic Diagram	C 3-904463A
• 20" MAIN CHASSIS Schematic Diagram (with 20" LED BOARD & 20"CRT SOCKET BOARD)	C11-904468A

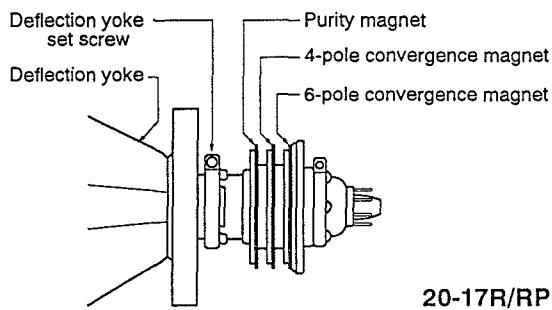
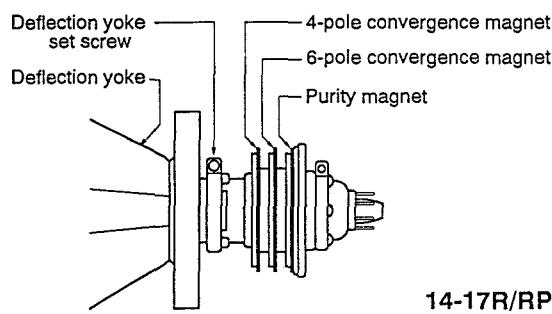
4. ELECTRIC PARTS LIST	14
(1) Guide for Reading the Parts List	14
(2) Manufacture Code	15
(3) Parts List	17

5. MECHANICAL PARTS and EXPLDED VIEW	31
• TM14-17R COLOR MONITOR BODY(1/2)	K3-950162(1/2)
• TM14-17R COLOR MONITOR BODY(2/2)	K3-950162(2/2)
• TM14-17R COLOR MONITOR RIGHT PANEL	K3-950163
• TM14-17R COLOR MONITOR LEFT PANEL	K4-950164
• TM20-17R COLOR MONITOR BODY(1/2)	K3-950165(1/2)
• TM20-17R COLOR MONITOR BODY(2/2)	K3-950165(2/2)
• TM20-17R COLOR MONITOR FRONT PANEL	K3-950166

1. MAINTENANCE and ADJUSTMENT

When the specified performance can no longer be obtained with the adjusters on the front panel or when parts have been replaced due to a malfunction, perform adjustment of the following parts.

1-1. MAIN CHASSIS



(1) Purity Adjustment

- ① Set the input signal to the full-white signal or similar signal which produces an even brightness over the entire screen.
- ② Press the [DEGAUSS] switch to demagnetize the magnetized shadow mask.
- ③ Turn "ON" only the [G.SCREEN] switch to set the rasters of the screen to a single green color.
- ④ Loosen the deflection yoke set screw, remove the silicon which holds the deflection yoke and CRT in place, and slide the deflection yoke all the way back.
- ⑤ Loosen the lock ring which holds the magnets in place.
- ⑥ Adjust the two purity magnets alternately so that there are green vertical lines at the center of the screen.

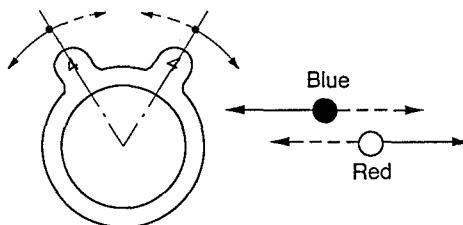
- ⑦ While watching the screen, slide the deflection yoke forward so that the screen is an even green color. If the screen does not become an even green color, perform adjustment again from step ④.
- ⑧ Set to blue and red, and confirm that the screen is a single color.
- ⑨ Set to white rasters and if there is partial coloring of the rasters, slightly shift the position of the deflection yoke either forward or back.
- ⑩ After completing adjustment, tighten the deflection yoke set screw and lock ring.

(2) Convergence Adjustment

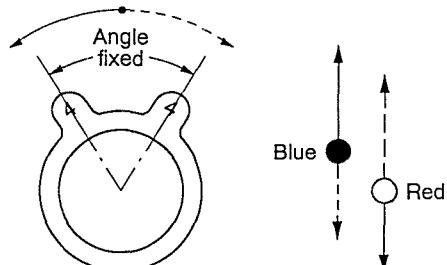
Before performing convergence adjustment, allow the monitor to warm up for at least 30 minutes. Input the cross hatch signal.

(a) Center convergence

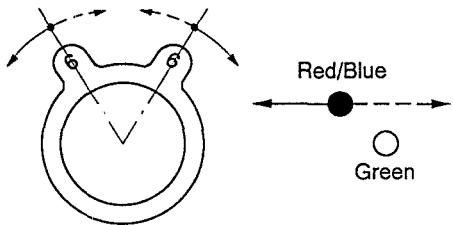
- ① Loosen the lock ring.
- ② Turn "ON" only the [R.SCREEN] and [B.SCREEN] switches to set to blue and red screen.
- ③ While paying attention to the cross section in the center of the screen, adjust the angles of the two 4-pole magnets as shown below to adjust the shifting of the vertical blue and red lines.



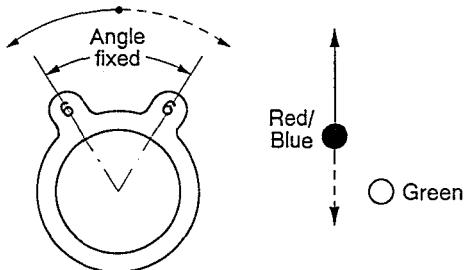
- ④ With the angle of the two 4-pole magnets remaining at that described in ③, rotate the two magnets simultaneously to adjust any shifting of horizontal lines.



- ⑤ Turn "OFF" all **SCREEN** switches to set to all-white screen.
- ⑥ Adjust the angle of the two 6-pole magnets and adjust any shifting of the red and blue vertical lines and green vertical lines.



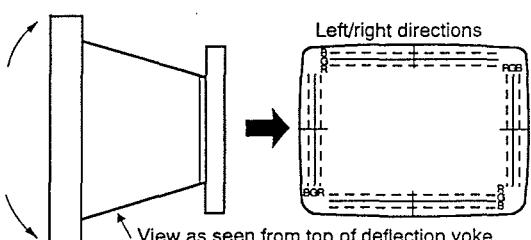
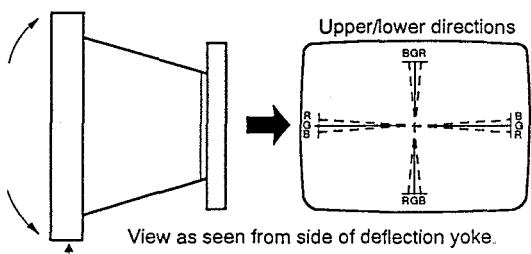
- ⑦ With the angle of the two 6-pole magnets remaining at that described in ⑥, rotate the two magnets simultaneously to adjust any shifting of the red and blue horizontal lines and green horizontal lines.



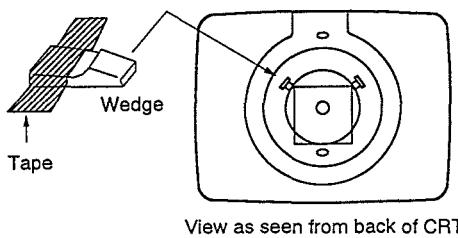
- ⑧ Tighten the lock ring after completing adjustment of the center convergence.
If there is poor peripheral convergence, perform the adjustment described in following (b).

(b) Peripheral convergence

- ① Slightly loosen the deflection yoke set screw.
- ② Move the deflection yoke up, down, and to the left and right as shown below to adjust any peripheral shifting.



- ③ After the completion of adjustment, insert wedges into the space between the deflection yoke and CRT as shown in the diagram below to fully lock the deflection yoke in place.



(3) Replacement of CRT

As the CRT for this monitor is supplied with the deflection yoke already attached, there is no need to readjust the purity and convergence.
Replacement of the CRT is performed in the following manner.

- ① Remove the four screws which hold the top cover, and remove the cover.
- ② Remove the four screws each which hold the right and left covers, and remove the covers.
- ③ Remove the anode cap of the CRT.
Be carefull not to get an electric shock when removing the anode cap since the electric charge of high voltage is charged inside of the CRT.
(Be extremely careful when removing the sucker of anode cap from the CRT.)
And remove the CRT SOCKET BOARD from the CRT.

- ④ Remove the TB1 (CRT GND) on the CRT SOCKET BOARD.

⑤ <TM14- 17R/RP>

- i) Disconnect the connector, which connects the FRONT RIGHT PANEL with the VIDEO BOARD, at the FRONT RIGHT PANEL side.
Then, remove the FRONT RIGHT PANEL from an escutcheon by removing the FRONT RIGHT PANEL fixing screws(M3 × 10).

- ii) Disconnect the connector, which connects the FRONT LEFT PANEL with the DEF & POWER BOARD, at the FRONT LEFT PANEL side.
Then, remove the FRONT LEFT PANEL from an escutcheon by removing the FRONT LEFT PANEL fixing screws(M3 × 10).

- <TM20- 17R/RP>**

- i) Disconnect the connector, which connects the FRONT PANEL with the VIDEO BOARD, at the FRONT PANEL side.

- Then, remove the FRONT PANEL from an escutcheon by removing the FRONT PANEL fixing screws(M3 × 10).
- ii) Disconnect the connector connecting the LED BOARD on the upper side of the escutcheon with the DEF & POWER BOARD.
 - ⑥ Disconnect the connector connecting the deflection yoke with the DEF & POWER BOARD.
 - ⑦ Disconnect the connector connecting the DEGAUSS coil with the DEF & POWER BOARD.
 - ⑧ Remove the eight screws (four screws on the top and each two screws on the right and left) which hold the main unit and escutcheon, and remove the escutcheon from the main unit together with the CRT.
Make sure that the neck of CRT does not touch the main unit at this time.
 - ⑨ Place the CRT on a stable surface with the escutcheon down. Place a cloth below the escutcheon to prevent it from being damaged. And remove the four screws which attach the escutcheon to the CRT.
At this time, pay attention not to break screw threads because the screw lock is painted on screws.
 - ⑩ Remove the degauss coil.
 - ⑪ Prepare the new CRT and reassemble the unit by following steps ① through ⑧ above in reverse order.

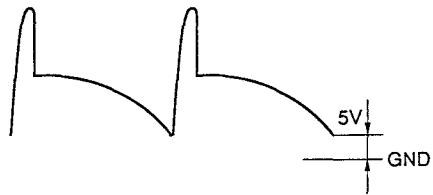
(4) Adjustment after CRT Replacement

- ① Tentative setting of SCR VR
 - i) Make sure that each connector is correctly connected, paying special attention to the connectors of anode cap, FOCUS and SCR.
 - ii) Set the SCR VR, which is close to the components side of the PC board, of the flyback transformer on the DEF & POWER BOARD to its MIN. position.
 - iii) Connect the AC cable as well as the signal cable and then turn the power on. At this time, make sure that no troubles are found.
 - iv) Rotate slowly the SCR VR clockwise to let pictures appear on the screen and set the SCR VR to the point where the luminance of the pictures does not vary even when the SCR VR is rotated.

- ② Setting of WIDTH, HEIGHT, etc. (Refer to Table 1 of Scanning Size)
 - i) Perform the adjustments of scanning size, linearity, pincushion distortion, raster position and picture position in normal scanning, using the following VRs.

* VR202(NOR WIDTH) VR204(PIN LEVEL) VR206(SIDE PIN PHASE) VR207(H CENT) VR209(V CENT)	} on the DEF & POWER BOARD
* VR905(NOR HEI) VR904(V LIN) VR908(H PHASE)	

- ii) After the above adjustment is completed, connect the probe to R248(collector side of Tr215) on the DEF & POWER BOARD and adjust VR903(V BIAS) so that the voltage of waveform end of vertical deflection output can be DC +5V.



- iii) Perform the adjustments of scanning sizes in under scanning and in 16:9 aspect ratio scanning, using VR203 (US WIDTH) on the DEF & POWER BOARD, VR906 (US HEIGHT) and VR907(16:9 HEIGHT) on the VIDEO BOARD.

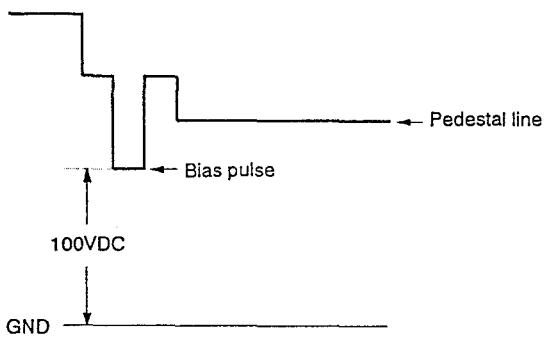
Table 1 SCANNING SIZE

	14"(mm)		20"(mm)	
	Height	Width	Height	Width
Normal Scan	The outer frame of picture contacts the escutcheon.	←	←	←
Under Scan	194	259	278	370
16:9 Scan	146	259	208	370

- ③ SCREEN VR(Reference Channel Decision)
- Connect the probe of an oscilloscope to TP1 (RK) on the CRT SOCKET BOARD and monitor the waveforms from the end of V.BLK to start of pictures at a V rate.
 - Next, adjust the SCREEN VR until the top of bias pulse reaches 100V DC.
 - Not changing the range of the oscilloscope, measure the voltages of bias pulse at TP2(GK) and TP3(BK) on the CRT SOCKET BOARD. Then, readjust the channel of the intermediate voltage among the three channels to 100Vdc with the SCREEN VR in order to decide the reference channel.

Setting of BIAS PULSE LEVEL

- Waveform of TP1
(V rate magnifying waveform)

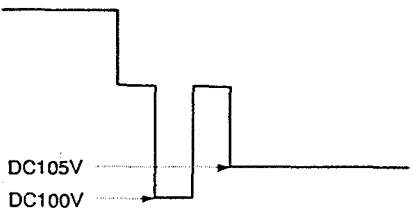


- Set the BACKGROUND VR of the reference channel decided in the step iii) to its MAX position.

Next, preset the BRIGHTNESS and adjust the pedestal potential of the reference channel to 105V DC with the PRESET BRIGHTNESS VR.

Setting of PRESET BRIGHTNESS

- Waveform of TP1



- Adjust the BACKGROUND VR set to MAX. in the above step so that the raster of the reference channel can be just before cut off on the screen. In addition, adjust in the same way as the reference channel in the other channels using the respective BACKGROUND VRs.

- Input the signal of detailed figures and optimize the FOCUS VR.

- ④-1 White Balance Adjustment(with Color Analyzer)
When replacing a CRT, adjust the white balance in the following manner.

- Demagnetize the entire monitor with a demagnetizing coil(external).
- Input the WINDOW signal as the COMPOSITE signal, apply the sensor of color analyzer to the center of a CRT and cover the CRT with a blackout curtain or something.
- Adjust the BACKGROUND and GAIN VRs on the FRONT PANEL so that the LOW LIGHT ($5cd/m^2$) and HIGH LIGHT ($120cd/m^2$) in the indication of the color analyzer can be equal. (The R channel is a reference.)
For the value of x and y, refer to the following.
- Make sure that the value is almost equal in Y/C or AUX.

	x	y
6500 °K	.313	.329
9300 °K	.283	.297

- ④-2 White Balance Adjustment(with human eyes)

- Input the COLOR BAR signal and turn the MONO switch on.
(Black-and-white step waveforms of a gray scale chart, etc. might also be available.)
- Paying attention to the dark area of the COLOR BAR signal, adjust the R, G and B BACKGROUND VRs on the FRONT PANEL so that the color of the area can be white.
- Next, pay attention to the bright area of the COLOR BAR signal and adjust the G GAIN and B GAIN VRs on the FRONT PANEL so that the color of the area can be white.
- Adjust the G and B GAIN VRs for the bright area as well as the G and B BACKGROUND VRs for the dark area so that all the area from bright one to dark one can be same color.

1-2 ADJUSTMENT PROCEDURE for VIDEO BOARD

The INPUT signal is to be the COLOR BAR (VIDEO A) input unless otherwise specified.

(1) Items Checked

- Set all the VRs on the VIDEO BOARD to the center position and attach the VIDEO BOARD to the main body of the monitor.
- Connect the specified cables to the connectors on the PC board respectively.

(2) Operation

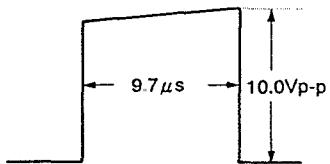
- Connect the AC cable after connecting the signal cable and turn the POWER switch on.
- After turning the POWER switch on, make sure that no trouble are found.

Then, set the SCAN switch to "NOR" position and obtain a synchronization by VR901 (H HOLD) and VR902(N V HOLD) for NTSC/VR401(P V HOLD) for PAL and next, adjust the HEIGHT and WIDTH using VR905(NOR HEI) on the VIDEO BOARD and VR202(NOR WIDTH) on the DEF & POWER BOARD in order to let the proper pictures appear on the screen.

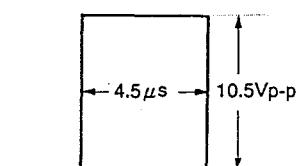
(3) Waveform Check(Pulse System)

- Check the waveforms at the following TPs.

- TP702(HD)

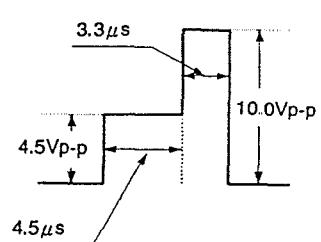


- TP703(BP.CLP.P)

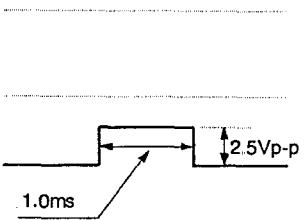


- TP705(CHROMA..S.C.P)

[H rate]

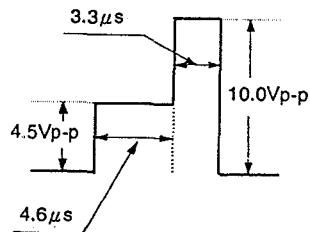


[V rate]

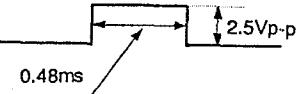


- TP706(VIDEO.S.C.P)

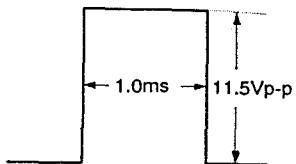
[H rate]



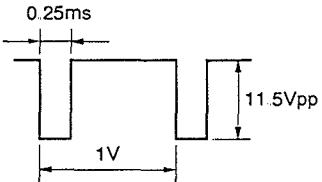
[V rate]



- TP707(VD)



- TP708 (BKG VD)



(4) Adjustments of Deflection System

The NTSC signal to VIDEO A input terminal or the PAL signal to VIDEO B input terminal should be inputted before the adjustments.

① VR901 (H HOLD)

- Select VIDEO A and connect the electrolytic capacitor which is equivalent to $47\mu F/25V$ between TP901 and TP903(GND) to get a horizontal free-running state.
- Adjust VR901(H HOLD) so that the pictures can roll, slanting to the right.

② VR902 (N. V HOLD)

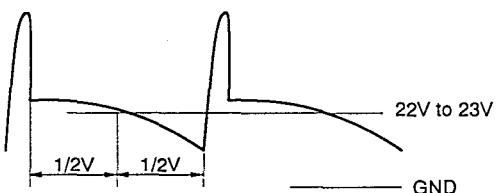
- Select VIDEO A and connect the electrolytic capacitor which is equivalent to $47\mu F/25V$ between TP902 and TP903(GND) to get a vertical free-running state.
- Adjust VR902(N. V HOLD) so that the pictures can roll upward a little faster.

③ VR401 (P. V HOLD)

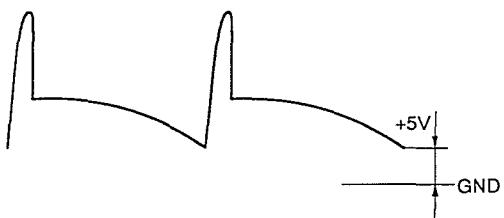
- Select VIDEO B and connect the electrolytic capacitor which is equivalent to $47\mu F/25V$ between TP902 and TP903(GND) to get a vertical free-running state.
- Adjust VR401(P. V HOLD) so that the pictures can roll upward a little faster.

④ VR903 (V BIAS)

- Select VIDEO A and set the SCAN switch to "NOR" position.
- Connect the probe to R248 (collector side of Tr215) on the DEF & POWER BOARD and adjust the voltage at the medium point of 1V to 22V to 23V, half of the supply voltage.



- At this time, adjust generally HEIGHT(VR905), LINEARITY(VR904), WIDTH (VR202 on the DEF & POWER BOARD) and V CENT (VR209 on the DEF & POWER BOARD), referring to Scanning Size(Table 2).
- Next, readjust VR903 so that the voltage at the end of the V deflection can be +5V dc.



(5) VR908 (H. PHASE)

- Input the COLOR BAR and set the SCAN switch on the FRONT PANEL to UNDER SCAN position. Then, adjust VR908 so that the picture can be positioned at the center of the raster.(See Fig.1)

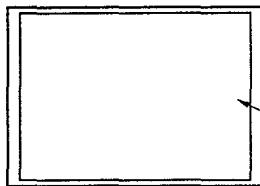


Fig. 1

- Input the CROSS HATCH signal and check the side pin. When the side pin is wrong, optimize it with VR204(PIN LEVEL) and VR206(SIDE PIN PHASE) on the DEF & POWER BOARD.

- ⑥ VR905(NOR HEI.) }
VR904(V. LIN.) } on the VIDEO BOARD

- VR209 (V CENT)
VR207(H CENT)
VR202 (NOR WIDTH) } on the DEF &
POWER BOARD

Adjust the scanning size and V linearity in normal scanning using the above VRs. (For the scanning size, refer to Table 2.)

- ⑦ VR906(U HEI.) } on the VIDEO BOARD
VR907(16:9 HEI) }
VR203(US WIDTH) } on the DEF &
POWER BOARD

Using the above VRs, adjust the scanning sizes of the pictures in under scanning as well as in 16:9 aspect ratio scanning as shown in the following table.

Table 2 SCANNING SIZE

	14"(mm)		20"(mm)	
	Height	Width	Height	Width
Normal Scan	The outer frame of picture contacts the escutcheon.	↔	↔	↔
Under Scan	194	259	278	370
16:9 Scan	146	259	208	370

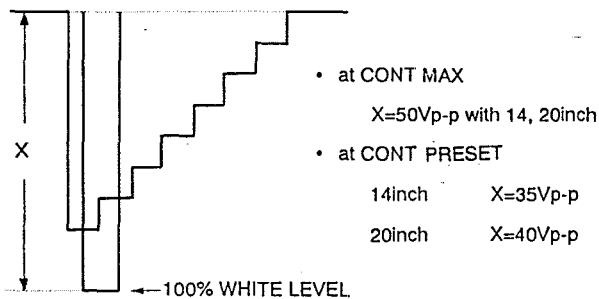
(5) Adjustments of VIDEO System—Level Adjustment of LUMINANCE Signal

① VR601 (R GAIN)

- Select AUX and set S1(RGB/YPbPr selector switch) on the VIDEO BOARD to "RGB" position.

- ii) Input the COLOR BAR (BURST, CHROMA : OFF) or the WINDOW signal (BURST, CHROMA : OFF) to the R/Pr input.
- iii) Input the external SYNC signal and select EXT. SYNC.
- iv) Connect the probe to TP1(RK) inside the CRT SOCKET BOARD and adjust VR601(R GAIN) so that the white area of 100% can be 50Vp-p when setting CONTRAST VR to "MAX" position.

• TP1(RK)

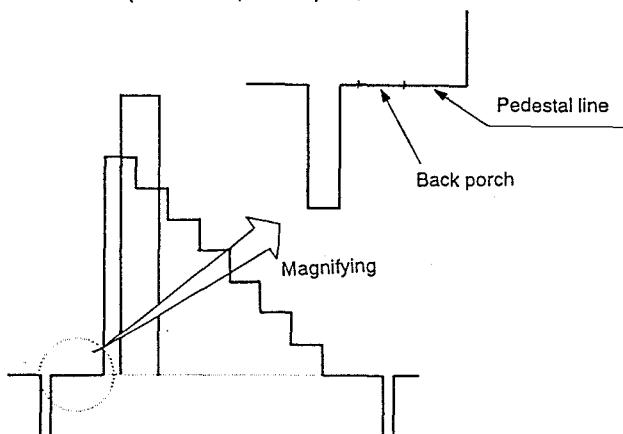


- v) Preset CONTRAST and adjust the white area of 100% to 35Vp-p(40Vp-p) with the CONTRAST PRESET VR in this stage. (In the last stage, it is to be adjusted to 120cd/ m² with a luminance meter.)

② VR104 (Y CLP. LEVEL) VR103 (Y. LEVEL)

- i) Input the COLOR BAR(BURST, CHROMA : OFF) signal to the G/Y input and set S1(RGB ↔ YPbPr selector switch) on the VIDEO BOARD to "YPbPr" position.
- ii) Preset CONTRAST as well as BRIGHTNESS and connect the probe to TP102(GND : TP104), then adjust VR104(Y CLP. LEVEL) until the level at back porch part of waveform matches the pedestal line. (Range of an oscilloscope : 50mv/div, 10μ sec/div)

• TP102(Y waveform) Adjustment of CLAMP LEVEL

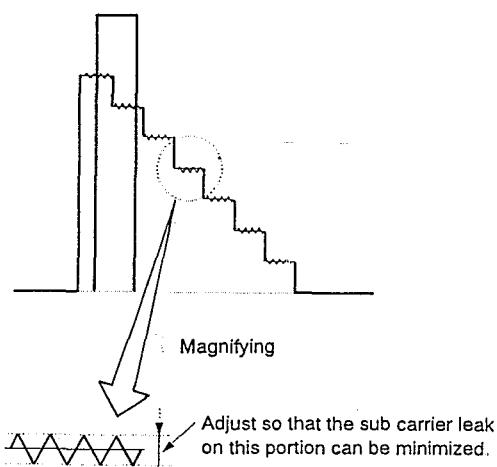


- iii) Connect the probe to TP1(RK) on the CRT SOCKET BOARD and adjust VR103 (Y. LEVEL) until the white area of 100% reaches 35Vp-p.
(BRIGHTNESS, CONTRAST : PRESET)

③ L201 (N. TRAP) L301(P. TRAP)

- i) Input the NTSC SMPTE COLOR BAR signal to VIDEO A input terminal and input the PAL EBU COLOR BAR signal to VIDEO B input terminal.
- ii) Connect the probe to TP102 at a V rate, select VIDEO A, and set the COMB/TRAP switch on the FRONT PANEL to "TRAP" position. Then, magnifying the non-correlative portion between the scanning lines, that is, portion where color changes in the vertical direction, adjust L201(N TRAP) so that the carrier leak on the portion can be minimized.
- iii) Select VIDEO B and adjust L301(P TRAP) until the carrier leak is minimized.

• TP102(Y waveform) SUB CARRIER Leak



④ VR202 (COMB Y LEVEL) VR301 (PAL Y LEVEL)

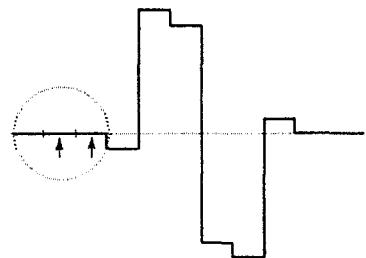
- i) Input the NTSC COLOR BAR to VIDEO A and input the PAL COLOR BAR to VIDEO B. Then, connect the probe to TP1(RK) on the CRT SOCKET BOARD. After selecting VIDEO A, adjust VR202 (COMB Y LEVEL) so that the white area of 100% can be 35Vp-p. In the case of selecting VIDEO B, adjust VR301(PAL Y LEVEL) in a similar way.

⑤ VR 201 (Y/C Y LEVEL)

Input NTSC COLOR BAR signal to Y/C input and connect the probe to TP1(RK) on the CRT SOCKET BOARD. After selecting Y/C, adjust VR201(Y/C Y LEVEL) so that the white area of 100% can be 35Vp-p.

(Connect the GND terminal of the oscilloscope to TP104 and its range is to be 100mV/div, 10 μ sec/div.)

- TP101(R-Y waveform)



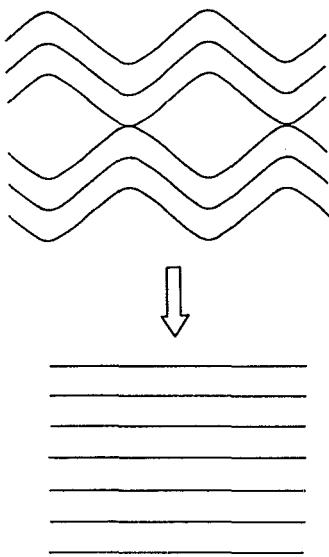
• TP101(R-Y waveform)

(6) Adjustments of VIDEO System—Level Adjustment of CHROMINANCE Signal

- ① VC201 (N COLOR HOLD)
VC301 (P COLOR HOLD)

- i) Input the NTSC COLOR BAR signal to VIDEO A and input the PAL COLOR BAR signal to VIDEO B. Then, Connect the probe to TP101 at a V rate.
- ii) Select VIDEO A and set S501 (AUTO/FORCED) to "FORCED" position.
- iii) At this time, adjust VC201(N COLOR HOLD) so that the wavy line of waveform on the oscilloscope can be a straight line.
- iv) Next, select VIDEO B and adjust VC301(P COLOR HOLD) so that the waveform can be a straight line in the same way as NTSC in step iii).
- v) Lastly, set S501 to "AUTO" position again.

• TP101(R-Y) Setting of COLOR HOLD



② VR102 (R-Y CLP LEVEL)

VR106 (B-Y CLP LEVEL)

- i) Select NTSC COLOR BAR of VIDEO A.
- ii) Connect the probe to TP101 and adjust VR102(R-Y CLP LEVEL) so that the level at back porch part of waveform can match the pedestal line.
- iii) Next, connect the probe to TP103 and perform the adjustment using VR106(B-Y CLP LEVEL) in the same way as the above.

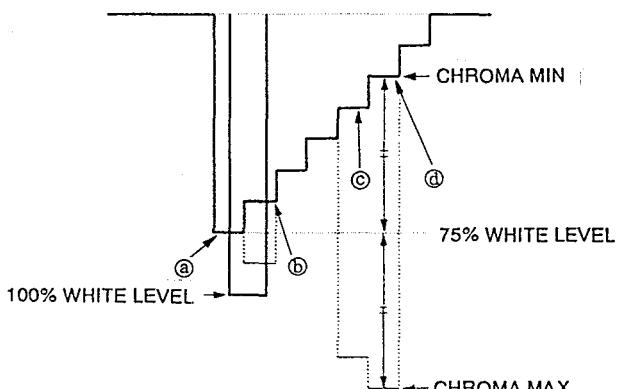
③ VR502 (D. R-Y LEVEL)

- i) Select the NTSC COLOR BAR of VIDEO A and connect the probe to TP1(RK) on the CRT SOCKET BOARD. Then, adjust HUE and CHROMA VRs on the FRONT PANEL so that the waveform of the R OUTPUT can be the normal R signal.

For adjusting methods of HUE and CHROMA, refer to the topic, "Adjustment of Color Balance" in the operation manual.

- ii) When setting the CHROMA VR to MIN position, adjust the spacing between ④ of 75% white and ⑥ to 2cm on the oscilloscope with its UNCAL knob.
- iii) Next, adjust VR502(D R-Y LEVEL) so that ④ can be 2cm to the plus(+) side toward ② when setting the CHROMA VR to MAX position.

• TP1(RK waveform) Setting of CHROMA LEVEL



iv) Here, preset the CHROMA VR, and adjust the CHROMA PRESET VR as well as the HUE PRESET VR on the FRONT PANEL to obtain the normal R waveform.

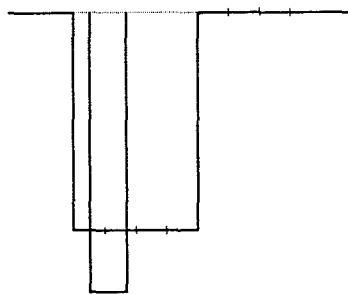
④ VR503 (D. B-Y LEVEL)

- i) Connect the probe to TP3(BK) on the CRT SOCKET BOARD and adjust VR503(D. B-Y LEVEL) so that the waveform of B OUTPUT can be the normal B signal.
(If the HUE is wrong, adjust it with this B OUTPUT.)

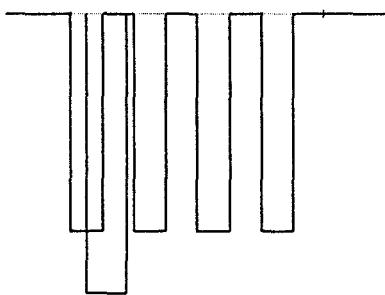
⑤ Waveform Check

- i) Check to see that the waveforms at TP1(RK), TP2(GK) and TP3(BK) on the CRT SOCKET BOARD are respectively the normal R, G and B signals.
- ii) In addition, make sure that the clamp voltage of pedestal is stable at each channel when turning the CONTRAST VR MIN to MAX.

- TP2(GK waveform)



- TP3(BK waveform)



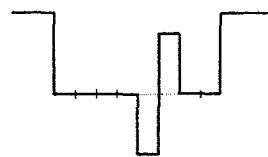
⑥ L306, VR303 (DL MATCH)

- i) Select the PAL COLOR BAR of VIDEO B and preset the CHROMA and the HUE.
Then, connect the probe to TP3(BK) on the CRT SOCKET BOARD and adjust the chroma level and line crawling with VR303 and L306 (DL MATCH).

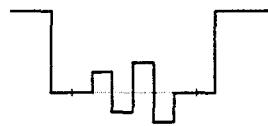
ii) Here, input the ANTI PAL signal and make sure that the waveforms at TP1, TP2 and TP3 are the waveforms shown below.

At ANTI PAL inputting

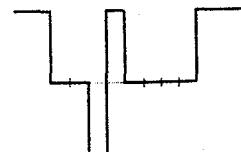
- TP1(RK)



- TP2(GK)



- TP3(BK)



⑦ Waveform Check in inputting Y/C signal

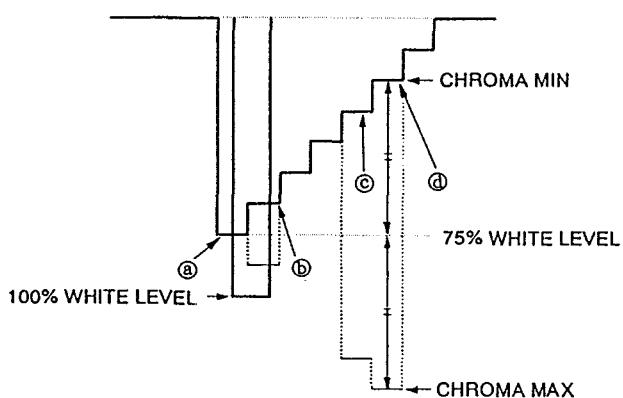
- i) Select Y/C after inputting the NTSC COLOR BAR to the Y/C input. Next, make sure that level of each cathode on the CRT SOCKET BOARD is the same when inputting the COMPOSITE signal.

(7) Adjustments of VIDEO System—Level Adjustment of YPBPR Input

① VR101 (R-Y LEVEL)

- i) After Inputting N10 or YPBPR signal which meets the SMPTE standard to R/R-Y, G/Y and B/B-Y inputs, select AUX.
Next, set S1(RGB ↔ YPBPR) to "YPBPR" position and connect the probe to TP1(RK) on the CRT SOCKET BOARD.
- ii) When setting the CHROMA VR to MIN position, adjust the spacing between ① of 75% white and ② to 2cm on the oscilloscope with its UNCAL knob.
- iii) Next, adjust VR101(R-Y LEVEL) so that ③ can be 2cm to the plus(+) side toward ④ when setting the CHROMA VR to MAX position.

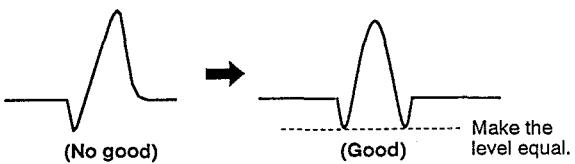
- TP1(RK waveform) Setting of CHROMA LEVEL



vi) Input the SWEEP signal as the RGB input and make sure respectively.

② VR501 (PHASE EQ.)

- i) Input the DOT BAR signal to the VIDEO A input and turn on the APERTURE switch.
- ii) Connect the probe to TP503 on the VIDEO BOARD and adjust VR501(PHASE EQ.) so that the edge balance can be symmetrical.



② YPBPr CHROMA (on the FRONT PANEL)

- i) Return the CHROMA VR to PRESET and adjust YPBPr CHROMA on the FRONT PANEL so that the waveform at TP1(RK) can be the normal R waveform.

③ VR105 (B-Y LEVEL)

- i) Connect the probe to TP3(BK) on the CRT SOCKET BOARD and adjust VR105 (B-Y LEVEL) to obtain the normal B waveform.
- ii) Connect the probe to TP2(GK) on the CRT SOCKET BOARD and make sure that the normal G waveform is obtained.

(8) Adjustments of VIDEO System – Frequency Characteristic Check

① VC501

- i) Input the NTSC(PAL) SWEEP signal(without BURST) to VIDEO A input and connect the probe to TP1 on the CRT SOCKET BOARD. Next, preset CONTRAST as well as BRIGHTNESS and adjust VC501 as follows.

$$\begin{aligned} \text{NTSC} &: 60\text{Hz to } 7\text{MHz} \pm 3\text{dB} \\ \text{PAL} &: 50\text{Hz to } 7\text{MHz} \pm 3\text{dB} \end{aligned}$$

- ii) Connect the probe to TP2(GK) and TP3(BK), and make sure that each waveform at them is within specified value.
- iii) Input the PAL(NTSC) SWEEP signal(without BURST) and the waveforms at TP1(RK), TP2 (GK) and TP3(BK) are within the specified value.
- iv) Input the SWEEP signal to Y/C input and make sure respectively.
- v) Input the SWEEP signal as the YPBPr input and set the COLOR / MONO switch to "MONO" position in order to make sure respectively.

1-3 ADJUSTMENT PROCEDURE for DEF & POWER BOARD

The INPUT signal is to be the COLOR BAR unless otherwise specified.

(1) Items Checked

- i) Attach the DEF & POWER BOARD to the main body of the monitor. At this time, make sure that the POWER switch of the monitor is turned off.
- ii) Connect the specified cables to the connectors on the PC board respectively. Especially connect the connectors of high voltage system securely.
(See below)

CRT anode cap
FOCUS connector
SCR connector
Deflection yolk connector

- iii) Connector for switching the power supply input
Switching the power, 100V / 200V system of the DEF & POWER BOARD is performed by inserting the short connector into CN105 and CN106.
Insert the connectors according to the supply voltage, refering to the following table.

Table 3

Supply Voltage	CN105	CN106
100V system (100~120V)	Insert short connector	Open
200V system (200~240V)	Open	Insert short connector

(2) Operation

- i) Set VR201 as well as SCR VR(which is close to the components side of the PC board) of the flyback transformer to MIN position and also set other VRs all to each center position.
- ii) After connecting the signal cable, connect the AC cable and then turn the POWER switch on.
- iii) Make sure that no troubles are found after turning the power on. Then, rotate slowly the SCR VR clockwise to let pictures shine on the screen and set the SCR VR to the point where the luminance of the pictures does not vary even when the SCR VR is rotated.
- iv) Inputting the signal of detailed figures, adjust the FOCUS VR on the flyback transformer (above the SCR VR) so that the pictures can be clear. Next, adjust VR202 (NOR WIDTH), VR204 (PIN LEVEL), VR206 (SIDE PIN PHASE), VR207(H CENT) and VR209 (V CENT) briefly. (Refer to Table 4 of Scanning Size.)

Table 4 SCANNING SIZE

	14"(mm)		20"(mm)	
	Height	Width	Height	Width
Normal Scan	The outer frame of picture contacts the escutcheon.	←	←	←
Under Scan	194	259	278	370
16:9 Scan	146	259	208	370

(3) Adjustment for Prevention of X-rays Radiation

- ① VR201 (PROTECT)
 - i) After checking that the POWER switch is turned off, connect the high voltage meter to the anode of CRT and also connect GND of the high voltage meter to that of CRT.
 - ii) After turning on the POWER switch, adjust the high voltage output to 28kV with VR101(+B ADJ.).
 - iii) Rotating slowly VR201, set the VR to the point where protection of the high voltage operates.
 - iv) Turn the POWER switch off once after the protection operates, adjust VR101 so that the high voltage output can be a little reduced. Then, turn the POWER switch on again.
 - v) Raise the high voltage output again with VR101 and check that the protection operates at 28kV.
 - vi) When the voltage for actuating the protection is not 28kV, repeat the procedure of step iii) to vi).

- ② VR101 (+B ADJ.)
 - i) Connect the "+" lead of a digital voltmeter to TP102 and the " - " lead to TP104 or the chassis.
 - ii) Adjust VR101 so that the voltmeter can show a reading of +110V.
 - iii) Check the following voltage at each TP.

TP101 → +150V ± 2V
TP103 → + 45V ± 2V
TP105 → + 16V ± 2V

- ③ After having completed the above adjustments, seal the whole adjusting side of VR101 and VR201 using Cemedine No. 1500 (Araldite) as shown in Fig.2.
These controls are not for field servicing and are fixed with glue after setting to avoid X-ray radiation which may cause one component failure in the circuit and misadjustment of these

controls. The sealing method is shown in the figure.

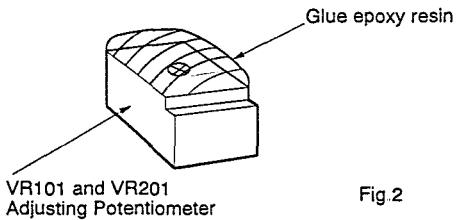


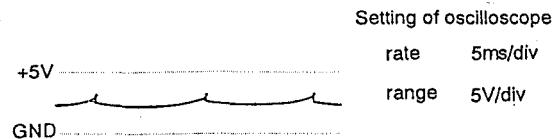
Fig.2

(4) Adjustments of High Voltage Regulator

① VR208 (HV. ADJ.)

- i) Set the scanning size to NORMAL and make CRT cut off.
- ii) Connect the probe of an oscilloscope to TP203 and adjust VR208 (HV ADJ.) so that the whole waveforms can be in the range of GND to 5V at the DC range.

- TP203(H.V.REG)



Adjust carefully not to damage the waveforms.

- iii) After turning the power off once, connect the high voltage meter to the anode of CRT and also connect GND of the high voltage meter to that of CRT. Then, turn the power on again.
- iv) Preset CONTRAST as well as BRIGHTNESS and make sure that the high voltage output is $24kV \pm 1kV$.
- v) Make sure that WIDTH does not vary when rotating quickly the CONTRAST and BRIGHTNESS VRs MIN to MAX. If WIDTH varies considerably at this time, adjust VR208 so that the change of WIDTH can be smallest. However, the high voltage output is to be $24kV \pm 1kV$.

(5) Adjustments of Scanning Size, etc.

① VR202(NOR WIDTH)

VR207(H CENT)

VR204(PIN LEVEL)

VR206(SIDE PIN PHASE)

- i) Input the COLOR BAR signal and press the SCAN switch on the FRONT PANEL to obtain under scanning. At this time, make sure that

the picture is at the center of the raster. If not so, adjust VR908(H PHASE) on the VIDEO BOARD so that the picture can be at the center of the raster. (See Fig.3)

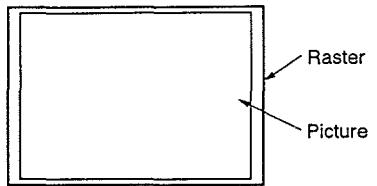


Fig. 3

- ii) Input the CROSS HATCH signal and adjust VR204(PIN LEVEL) as well as VR206(SIDE PIN PHASE) so that the PIN distortion can be optimized in both normal scanning and under scanning.

Next, input the COLOR BAR signal and adjust WIDTH in normal scanning (see Table 5) with VR202 (NOR WIDTH) as well as VR207(H CENT). (Refer to Normal scanning size in Table 5.)

② VR203 (US WIDTH)

- i) Input the COLOR BAR signal and adjust VR203(US WIDTH) so that WIDTH of picture can be 259mm for 14" or 370mm for 20" in under scanning. (Refer to Table 5 of scanning size)

③ VR209 (V CENT)

- i) Input the COLOR BAR signal and adjust VR209 so that the center of raster in vertical direction can be that of CRT in vertical direction at normal scanning. At this time, if the scanning size (HEIGHT) is wrong, adjust VR905 (NOR HEI.) on the VIDEO BOARD so that the outer frame of picture can contact the escutcheon. (See Table 5)

In addition, it is necessary to adjust VR906(U. HEI) and VR907(16:9 HEI) on the VIDEO BOARD when VR905(NOR HEI.) is adjusted.

The scanning sizes of picture is as follows.

Table 5 SCANNING SIZE

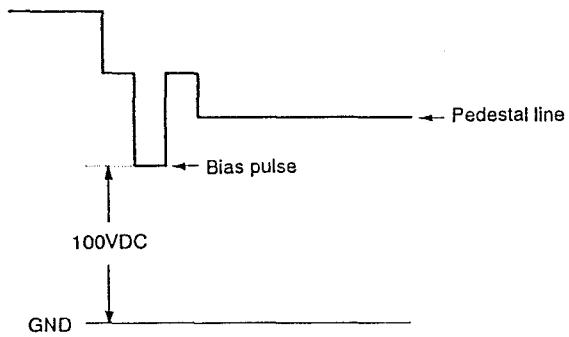
	14"(mm)		20"(mm)	
	Height	Width	Height	Width
Normal Scan	The outer frame of picture contacts the escutcheon.	←	←	←
Under Scan	194	259	278	370
16:9 Scan	146	259	208	370

(6) Adjustments of SCREEN VR(Reference Channel Decision) and FOCUS VR

- i) Connect the probe of an oscilloscope to TP1(RK) on the CRT SOCKET BOARD and monitor the waveforms from the end of V.BLK to start of pictures at a V rate.
- ii) Next, adjust the SCREEN VR until the top of bias pulse reaches 100V DC.
- iii) Not changing the range of the oscilloscope, measure the voltages of bias pulse at TP2(GK) and TP3(BK) on the CRT SOCKET BOARD. Then, readjust the channel of the intermediate voltage among the three channels to 100V DC with the SCREEN VR in order to decide the reference channel.

Setting of BIAS PULSE LEVEL

- Waveform of TP1
(V rate magnifying waveform)

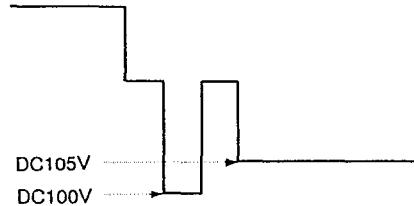


- iv) Set the BACKGROUND VR of the reference channel decided in the step iii) to its MAX position.

Next, preset the BRIGHTNESS and adjust the pedestal potential of the reference channel to 105V DC with the PRESET BRIGHTNESS VR.

Setting of PRESET BRIGHTNESS

- Waveform of TP1

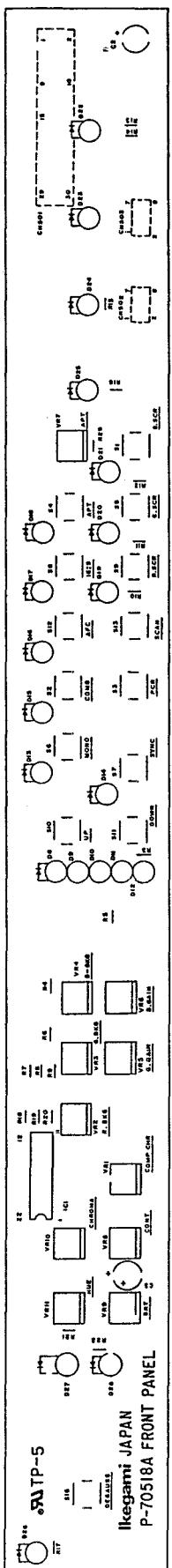


- v) Adjust the BACKGROUND VR set to MAX in the above step so that the raster of the reference channel can be just before cut off on the screen. In addition, adjust the other channels in the same way as the reference using the respective BACKGROUND VRs.

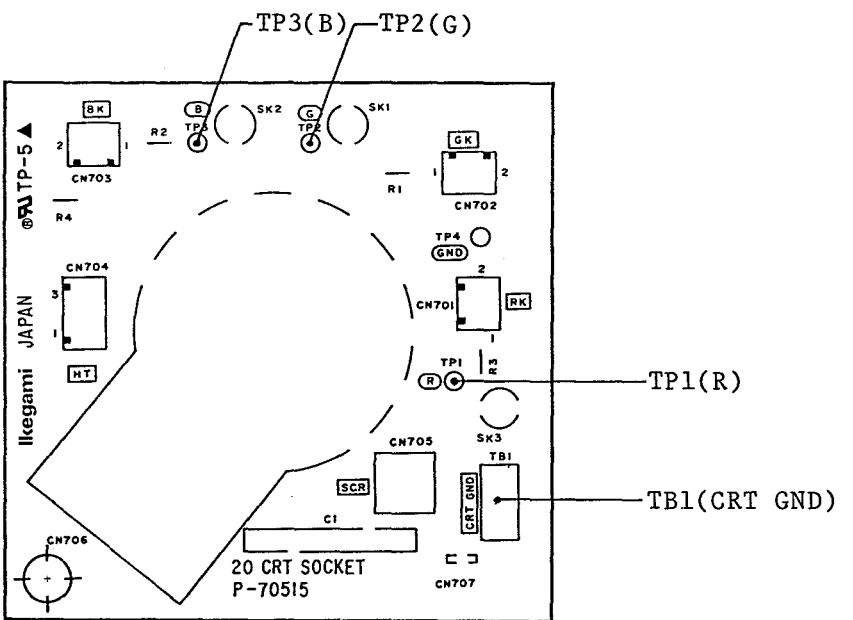
- vi) Input the signal of detailed figures and optimize the FOCUS VR.

2. PARTS LOCATION

17 SERIES 20" FRONT PANEL P-70518A

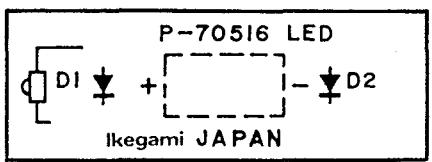


17 SERIES
20" FRONT PANEL
Parts Location
P-70518A



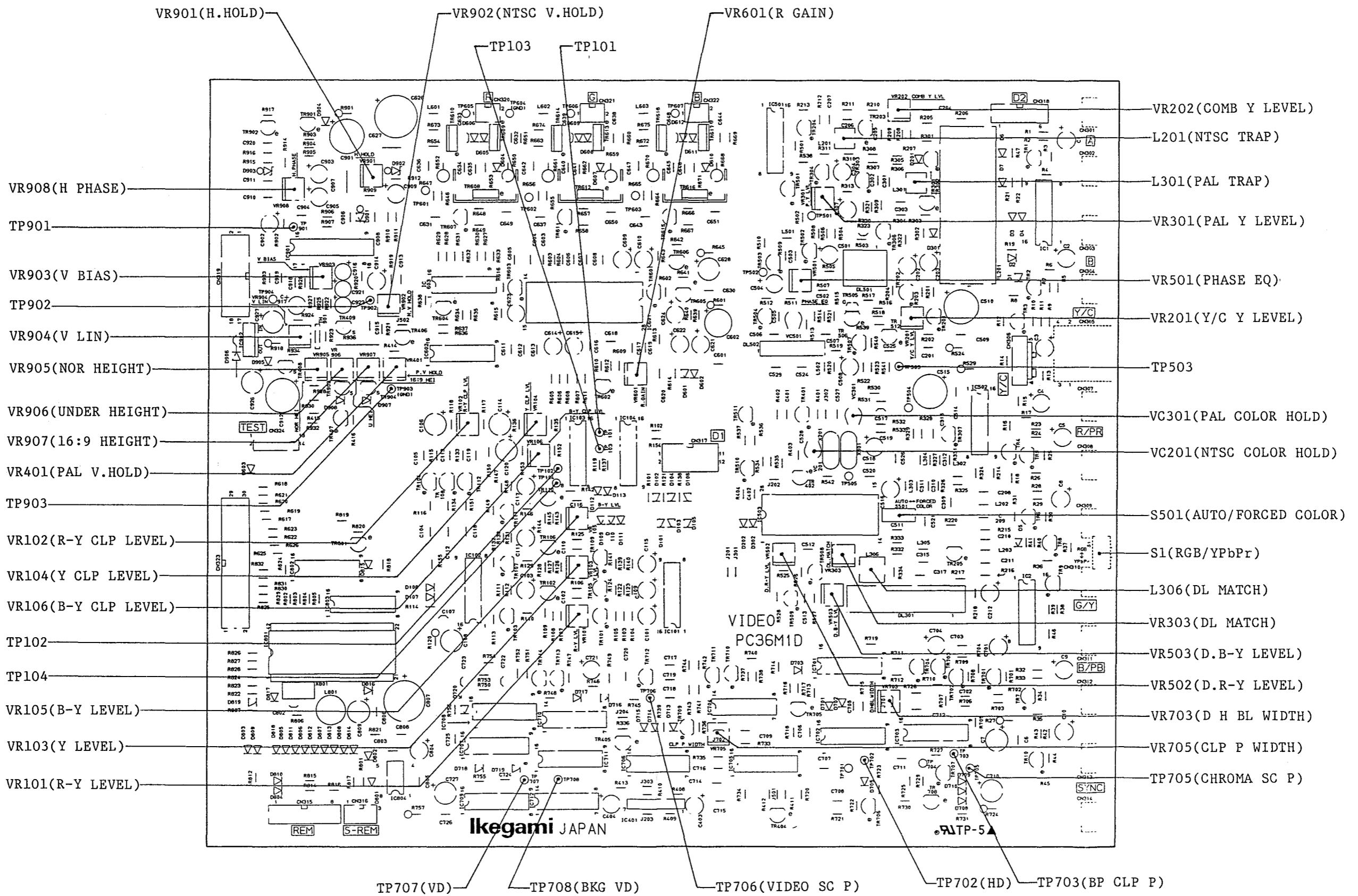
17 SERIES 20" LED BOARD P-70516

P/L-8



**17 SERIES
20" LED BOARD
Parts Location
P-70516**

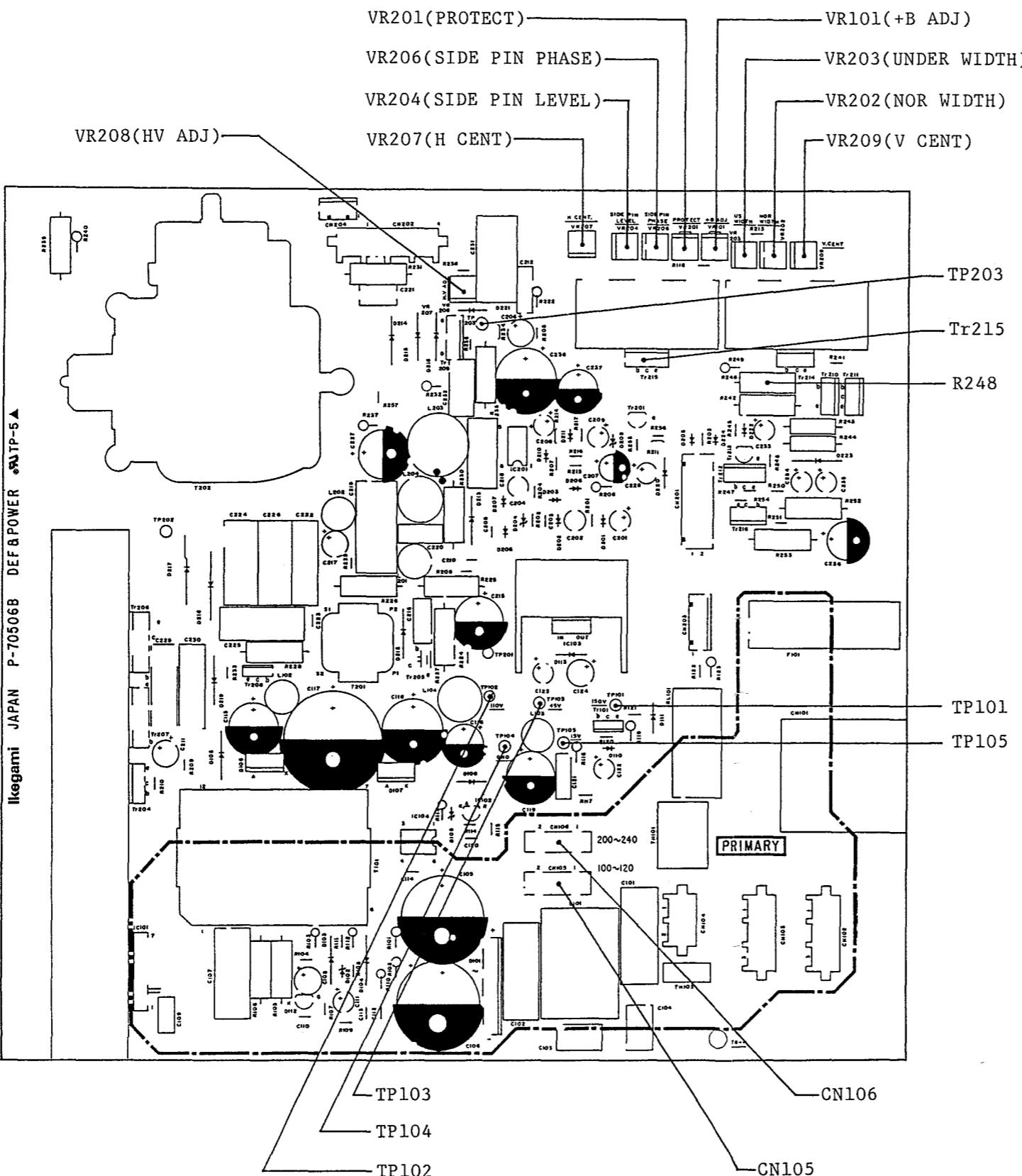
3. SCHEMATIC DIAGRAM



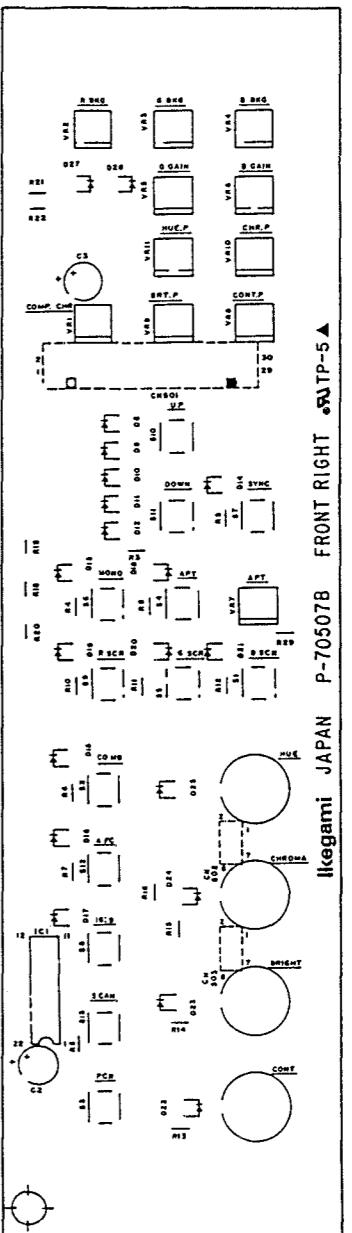
17 SERIES
VIDEO BOARD
Parts Location
PC36M1D

17 SERIES DEF & POWER BOARD P-70506B
14" FRONT RIGHT BOARD P-70507B

P/L-4

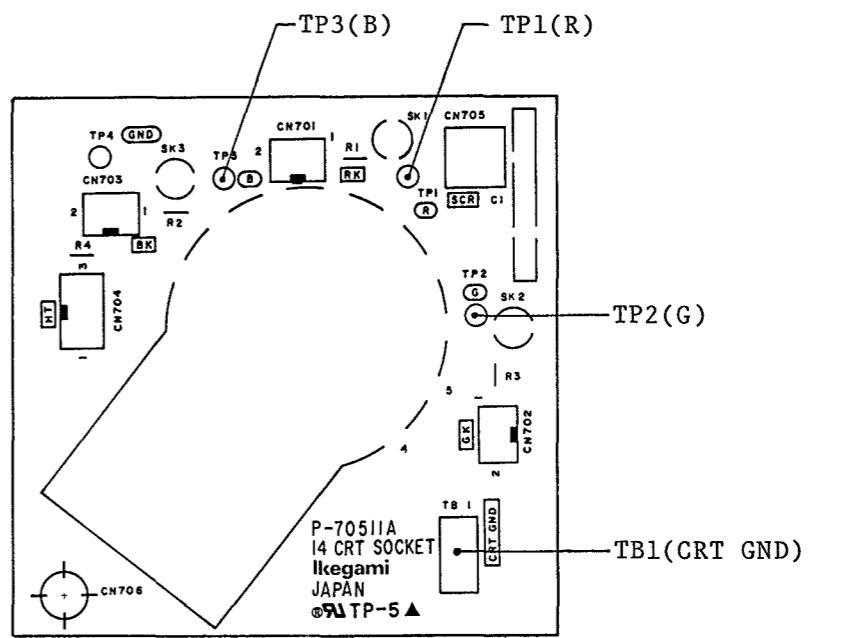


**17 SERIES
DEF & POWER BOARD
Parts Location
P-70506B**



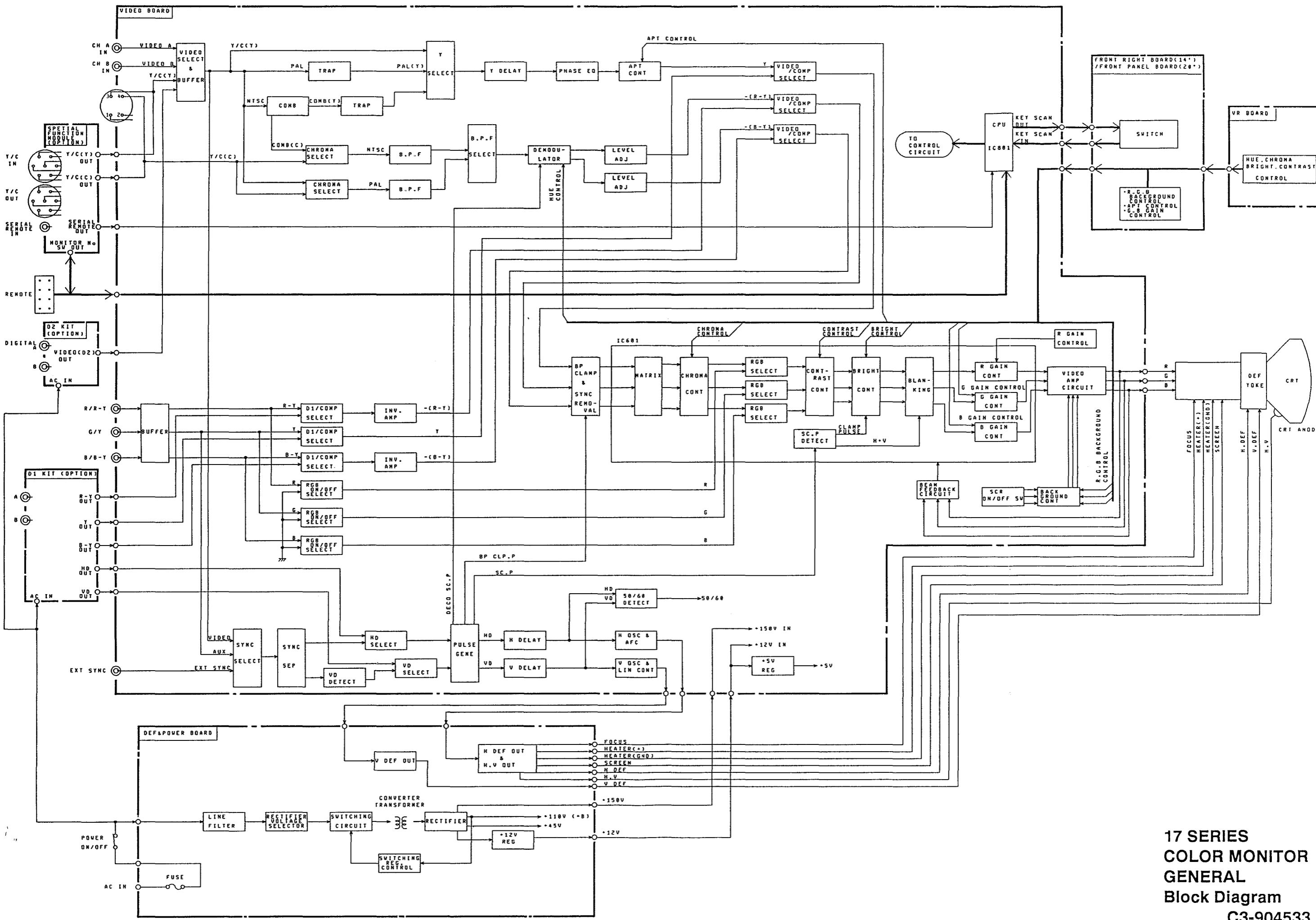
**17 SERIES
14" FRONT RIGHT BOARD
Parts Location
P-70507B**

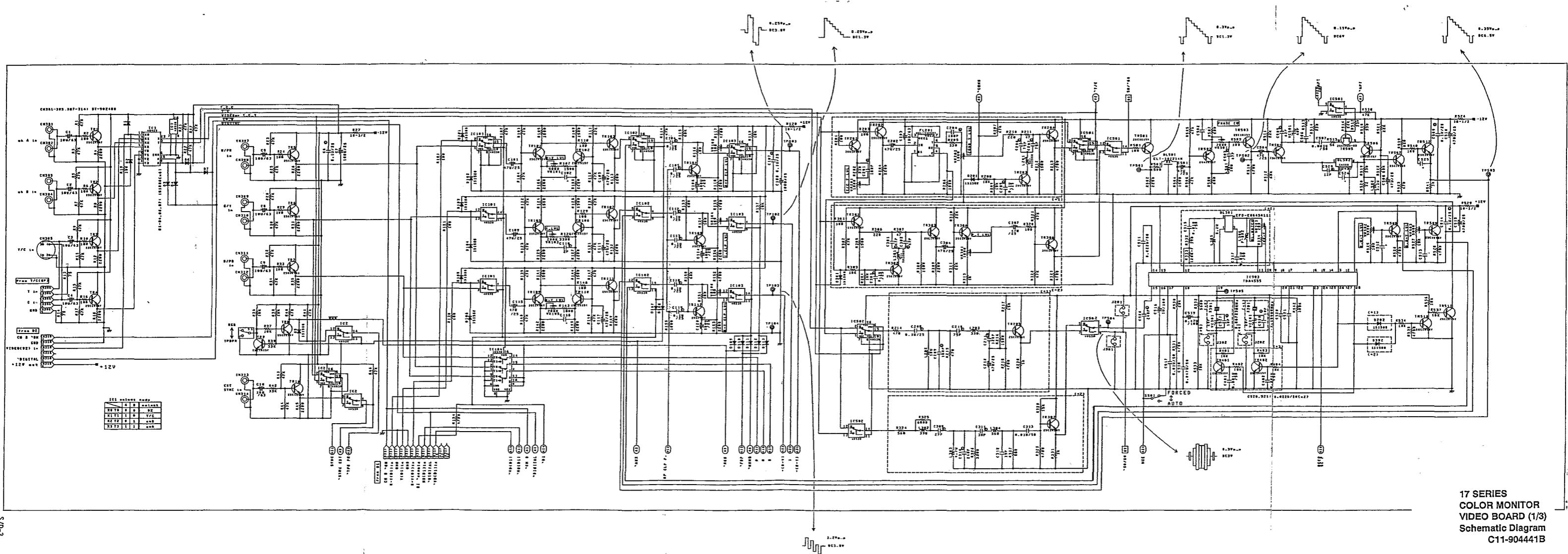
17 SERIES
14" CRT SOCKET BOARD
Parts Location
P-70511A

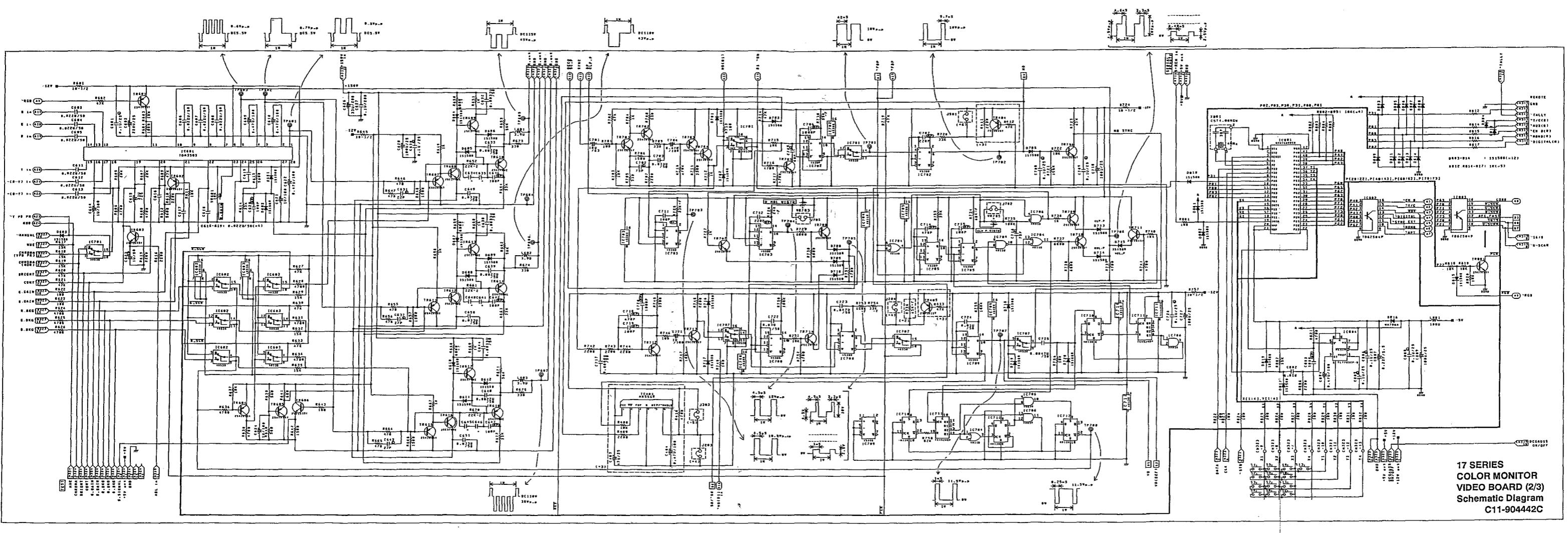


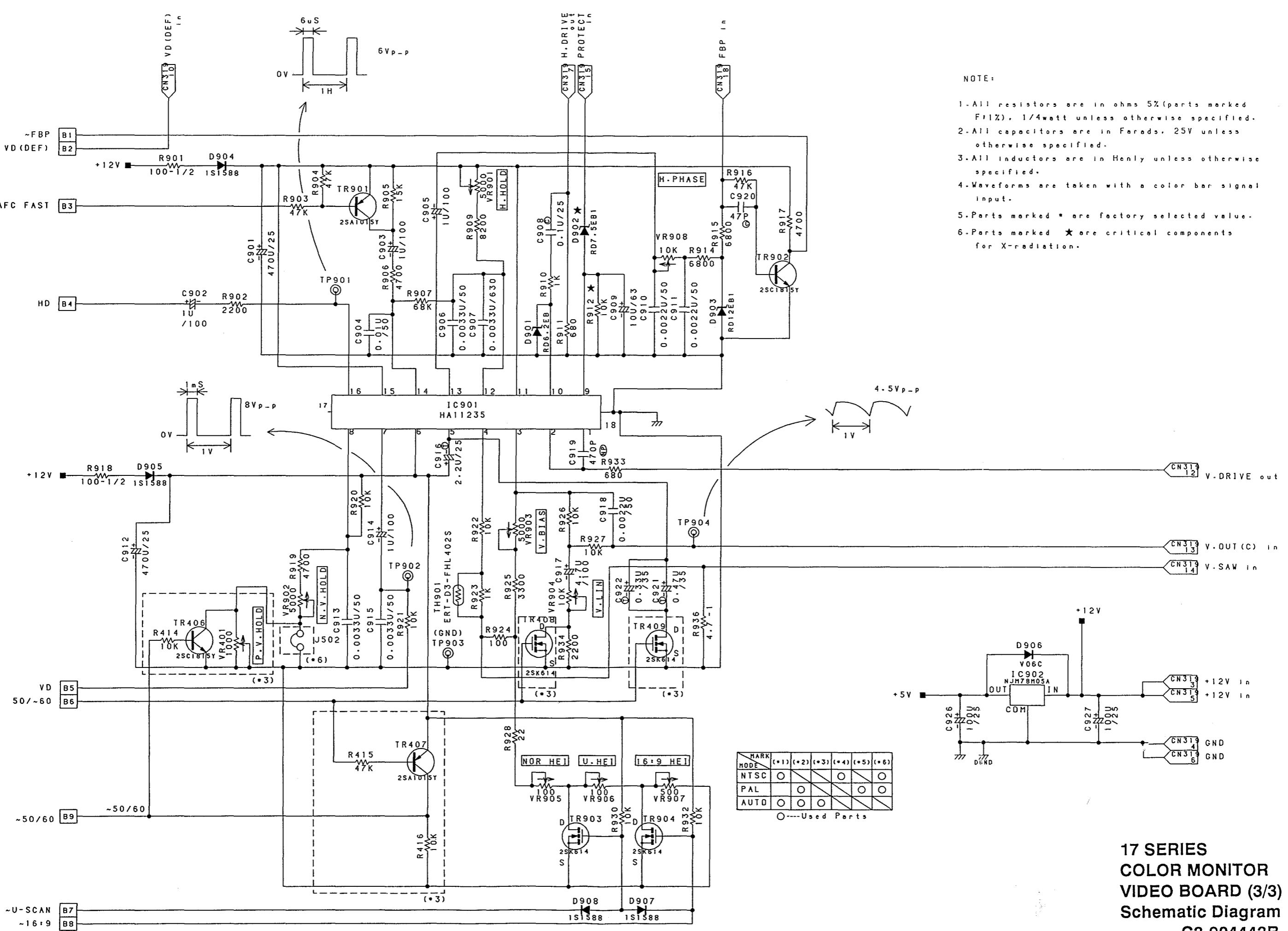
**17 SERIES
COLOR MONITOR
GENERAL
Block Diagram
C3-904533**

17 SERIES S/M

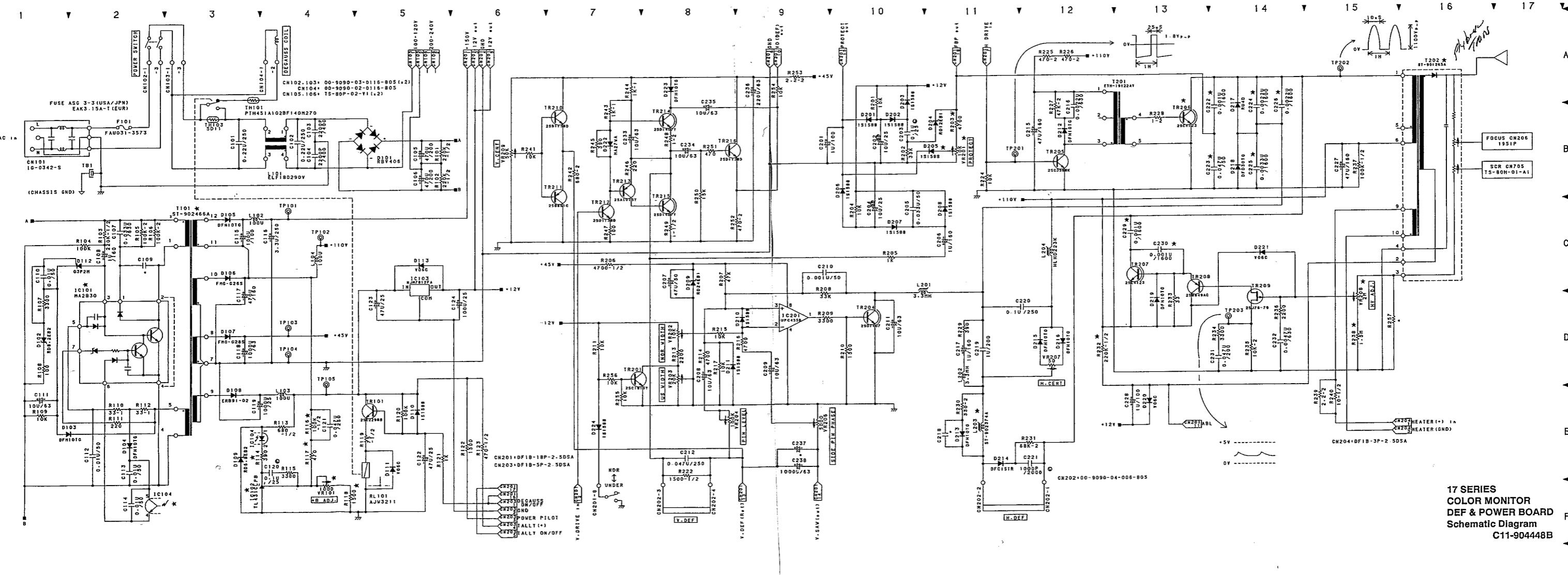




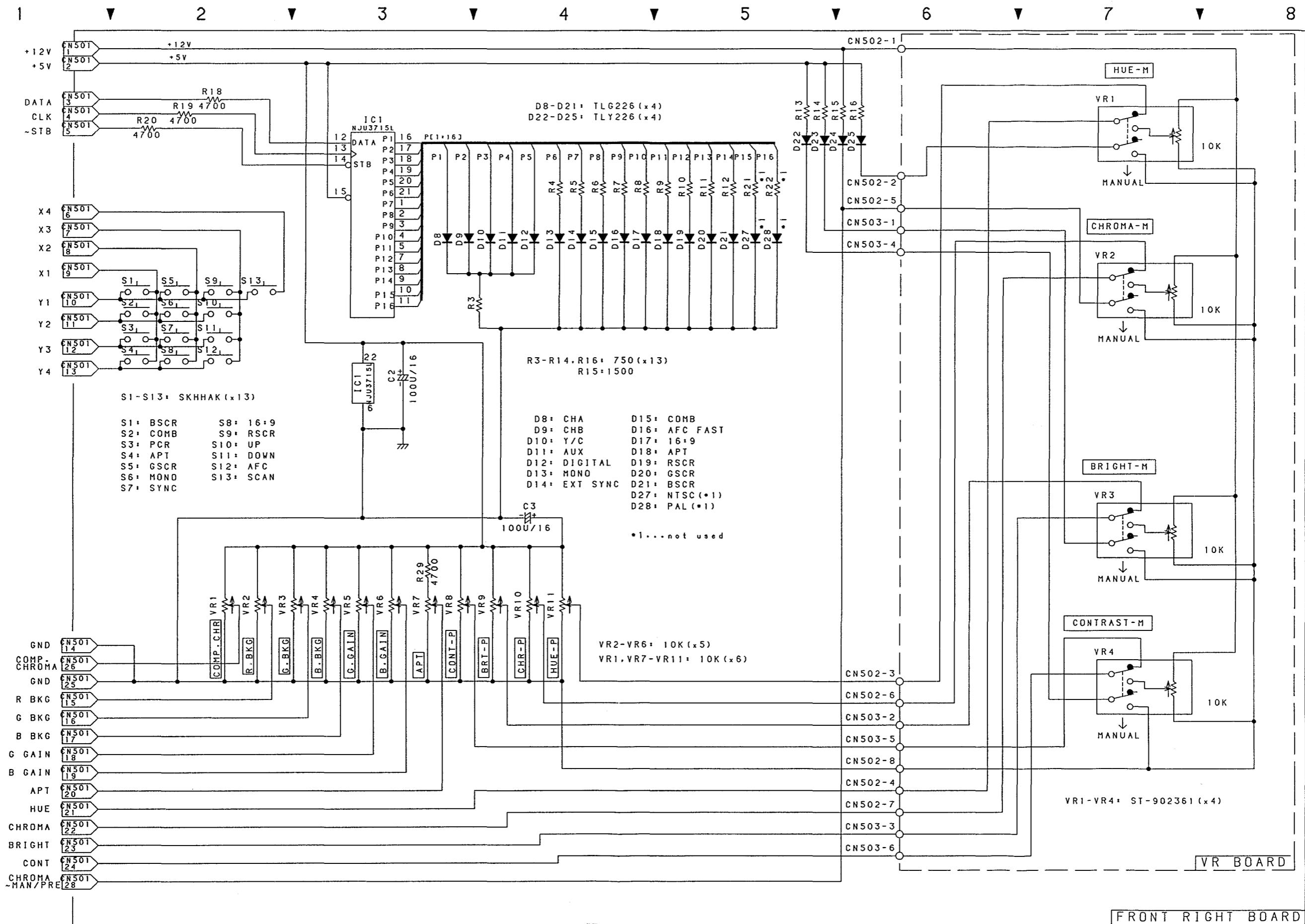




**17 SERIES
COLOR MONITOR
VIDEO BOARD (3/3)
Schematic Diagram
C3-904443B**

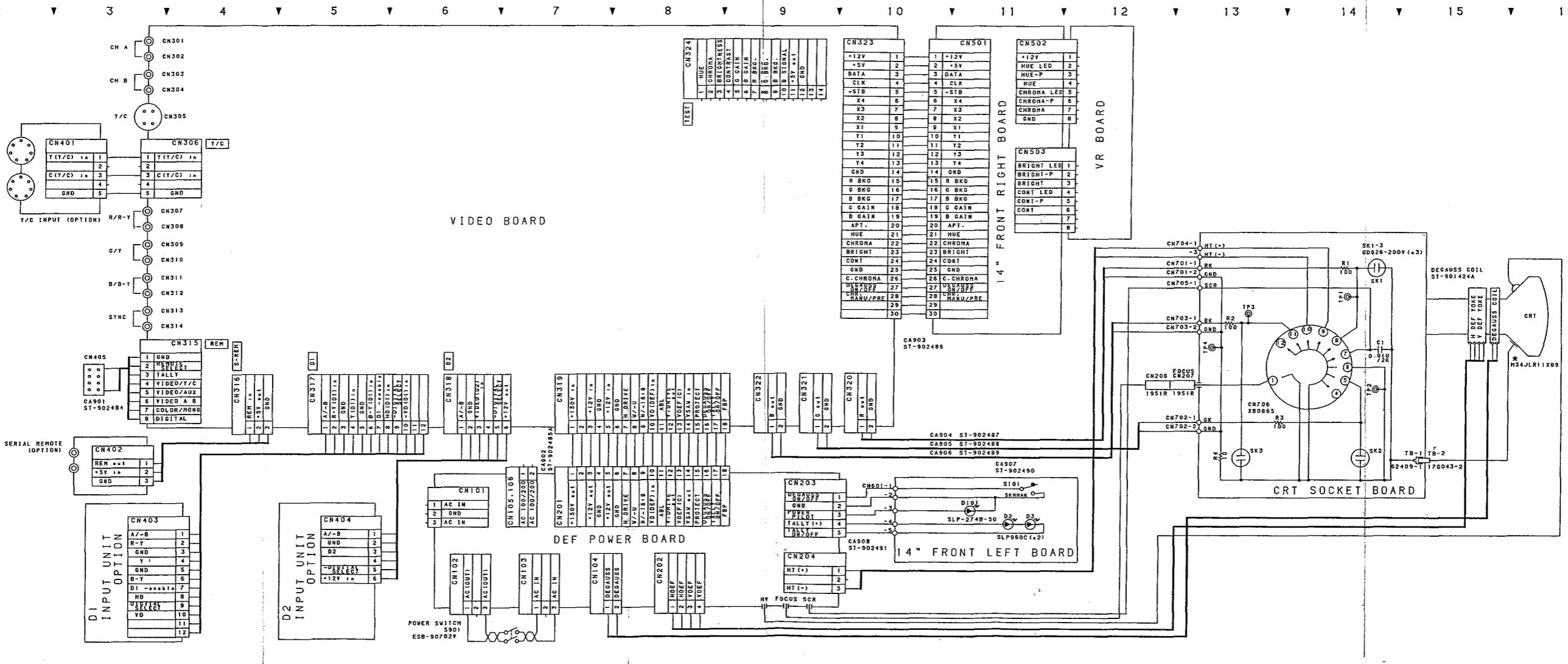


**17 SERIES
COLOR MONITOR
DEF & POWER BOARD
Schematic Diagram
C11-904448B**



17 SERIES COLOR MONITOR
14" FRONT RIGHT/VR BOARD
Schematic Diagram

C3-904462A



4. ELECTRIC PARTS LIST

(1) Guide for Reading the Parts List

The parts list for this color monitor consists of the following items.

Example :

(1)	VIDEO AMP BOARD		
(2)	PARTS NO.	(3) DESCRIPTION	(4) MFD.
(5)	< INTEGRATED CIRCUITS >		
	IC101 (CMOS)	μ PD4053BC	NEC
	IC102 (CMOS)	μ PD4528BC	NEC

- (1) Name of unit
- (2) Part No. shown in schematic diagram
- (3) Type designation of parts
- (4) Company name (refer to the next page.)
- (5) Part name

Note

1. When touching the following parts, pay special attention.
CMOS IC, delay line, X`tal oscillator, transformer
2. Parts marked with \ast are for adjustment use.
3. Asterisked parts are parts having important factors against X - ray radiation.
4. All the parts may be subject to change for further improvement.

(2) Manufacture Code

AGT	AUGAT INC.	U.S.A.
ALP	ALPS ELECTRIC CO.,LTD.	Japan
AMP	AMP, Ltd.	Japan
ANA	Analog Devices, Inc.	U.S.A.
ASA	ASAHI ELECTRONICS INC.	Japan
BEC	Beckman Industrial	U.S.A.
COS	TOKYO COSMOS ELECTRIC CO.,LTD.	Japan
CPL	COPAL ELECTRONICS CO.,LTD.	Japan
DDK	DAI-ICHI DENSHI KOGYO K.K.	Japan
DIT	DONG IL TECHNOLOGY LTD.	Korea
ELC	Elco International K.K.	Japan
EMD	EMUDEN MUSEN KOGYO CO.,LTD.	Japan
FDK	Fuji Electrochemical Co.,Ltd.	Japan
FJE	Fuji Electric Co.,Ltd.	Japan
FJS	Fujisoku Electric Co.,Ltd.	Japan
FJT	FUJITSU LIMITED	Japan
FKD	Fukuda S.S	Japan
FKK	Fujimoto Kinzoku Co.,Ltd.	Japan
FOS	FOSTER ELECTRIC CO.,LTD.	Japan
HDK	HOKURIKU ELECTRIC INDUSTRY CO.,LTD.	Japan
HIM	HEINEMANN ELECTRIC COMPANY	U.S.A.
HIR	HIROSE ELECTRIC CO.,LTD.	Japan
HIT	Hitachi,Ltd.	Japan
HOS	Hosiden Electronics Co.,Ltd.	Japan
HRA	HIRAKAWA ELECTRIC WIRE MFG.CO.,LTD.	Japan
HRN	HARUNA DENSHI co.,ltd.	Japan
IKE	Ikegami Tsushinki Co.,Ltd.	Japan
ISI	Ishizuka Electronics Corporation	Japan
IWT	IWATSU SEIMITSU CO.,LTD.	Japan
JAE	JAPAN AVIATION ELECTRONICS IND.LTD	Japan
JFC	JAPAN FINE CHEMICAL CORP.	Japan
KCK	KCK CO.,LTD.	Japan
KDK	KAWASAKI ELECTRIC WIRE CO.,LTD.	Japan
KEL	KEL CORPORATION	Japan
KIN	KINSEKI, LIMITED	Japan
KMY	KAMAYA ELECTRIC CO.,LTD.	Japan
KOA	KOA CORPORATION	Japan
KYC	KYOCERA CORPORATION	Japan
LTL	LITTELFUSE	U.S.A.
MAC	MAC EIGHT Co.,Ltd.	Japan
MAR	MARCON ELECTRONICS CO.,LTD.	Japan
MAT	Matsushita Electric Industrial Co.,Ltd.	Japan
MIZ	MIZUTANI ELECTRIC IND.CO.,LTD.	Japan
MMD	MORIMATSU CO.,LTD.	Japan
MMM	SUMITOMO 3M CO.LTD	Japan
MOT	MOTROLA INC	U.S.A.
MUR	MURATA MFG.CO.,LTD.	Japan
NAT	JAPAN SOLDERLESS TERMINAL MFG. CO.,LTD.	Japan
NBL	NOBLE MUSEN CO.,LTD.	Japan
NCC	MATSUO ELECTRIC CO.,LTD.	Japan
NCH	NIPPON CHEMI-CON CORPORATION	Japan
NEC	NEC Corporation	Japan
NHK	NIHON HODEN KENKYUSHO	Japan
NKA	NIHON KAIHEIKI IND.CO.,LTD.	Japan
NKM	NIKKOHM CO.,LTD.	Japan
NMO	Nihon Molex	Japan
NOB	TEIKOKU TSUSHIN KOGYO CO.,LTD.	Japan
NSC	National Semiconductor Corporation	U.S.A.
OEL	OSHINO ELECTRIC LAMP WORKS,LTD.	Japan
OKA	OKAYA ELECTRIC INDUSTRIES CO.,LTD.	Japan
OMR	OMRON Corporation	Japan
PRM	PRECI-DIP S.A.	Swiss
QQQ	CHUOMUSEN CO.,LTD.	Japan
RYO	Ryosan Company,Limited	Japan
SAT	SATO PARTS CO.,LTD.	Japan
SCH	SCHURTER	Swiss
SCS	SAITO CORD MFG.CO.,LTD.	Japan
SIN	SHINYEI KAISHA	Japan
SKK	Sinetsu Kagaku Kogyo Co.,Ltd.	Japan
SKN	SANKEN ELECTRIC CO.,LTD.	Japan
SKO	Sankoshia	Japan

SMK	SMK Corporation	Japan
SON	Sony Corporation.	Japan
SOS	SOSHIN ELECTRIC CO.,LTD.	Japan
SRP	Sharp Corporation	Japan
SSM	SUSUMU CO.,LTD.	Japan
STL	STANLEY ELECTRIC CO.,LTD.	Japan
SUD	SUMIDA ELECTRIC CO.,LTD.	Japan
SWC	SHOWA ELECTRIC WIRE & CABLE CO.,LTD.	Japan
SYO	SANYO ELECTRIC CO.,LTD.	Japan
TAD	TAIKI DENKI CO.,LTD.	Japan
TAJ	TAJIMI ELECTRONICS CO.,LTD.	Japan
TAM	TAMA ELECTRIC Co.,Ltd.	Japan
TDK	TDK Corporation	Japan
TEL	TODAI ELECTRIC LTD.	Japan
TEX	TEXAS INSTRUMENTS	U.S.A.
TKO	TOKO, INC.	Japan
TND	TANAKA ELECTRONICS IND.CO.,LTD.	Japan
TOK	TOKAI COMMUNICATION INDUSTRY CO.,LTD.	Japan
TOS	TOSHIBA CORPORATION.	Japan
TYO	TAIYO TSUSHIN KOGYO K.K.	Japan
YTD	YAMATE ELECTRIC CO.,LTD.	Japan

(3) Parts List

MAIN CHASSIS (COMMON)

94058-15040 PP-904966 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< SWITCHES >							
S901	ESB-90702V	MAT	20-34323-00201				
< CONNECTORS >							
CN102	60-9090-303-118-006	ELC	20-30508-23031	CN103	60-9090-303-118-006	ELC	20-30508-23031
< TEST POLES >							
TB 2	170043-2	AMP	20-30560-00030				
< OTHERS >							
CA901	ST-902484	HIR	20-66995-24840	CA902	ST-902485A	HIR	20-66995-24850
CA903	ST-902486	HIR	20-66995-24860	CA904	ST-902487	HIR	20-66995-24870
CA905	ST-902488	HIR	20-66995-24880	CA906	ST-902489	HIR	20-66995-24890
CA907	ST-902490	HIR	20-66995-24900				
	NO.3484-1000	MMM	20-68082-00100				

MAIN CHASSIS (14")

94058-15120 PP-904967 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< INDUCTANCE COILS >							
L 1	ST-901424A	IKE	20-40985-14240				
< OTHERS >							
CA908	ST-902491	HIR	20-66995-24910				

MAIN CHASSIS (20")

94058-15060 PP-904968 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< INDUCTANCE COILS >							
L 1	ST-901467A	ITC	20-40985-14671				

ACCESSORY (COMMON)

94058-15071 PP-904994 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
-----	-------------	------	------------	-----	-------------	------	------------

< OTHERS >

S-1608A HIR 20-30391-00200
 P-1608A-C-20 HIR 20-30331-00100

Female 2.0mm

ACCESSORY (JPN)

94058-15072 PP-905038 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
-----	-------------	------	------------	-----	-------------	------	------------

< OTHERS >

VFF0.75SQX2 2.5M M/F SCS 20-66604-02000

ACCESSORY (USA)

94058-15073 PP-905039 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
-----	-------------	------	------------	-----	-------------	------	------------

< OTHERS >

KP-30.SJT/18AWG.KS-16A8FT KDK 20-66603-00100

ACCESSORY (EUR)

94058-15074 PP-905040 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
-----	-------------	------	------------	-----	-------------	------	------------

< OTHERS >

KP-4819D KS-31A GTCE-3 2M M/F KDK 20-66603-00200

VIDEO BOARD

94058-15020 PP-904960 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< INTEGRATED CIRCUITS >							
IC 1	TC4052BP	TOS	20-01572-20940	TR503	2SC1815-Y TPE2	TOS	20-02824-05702
IC 2	TC4053BP	TOS	20-01572-20950	TR504	2SA1015-Y TPE2	TOS	20-02822-05402
IC101	TC4053BP	TOS	20-01572-20950	TR505	2SK192A-GR	TOS	20-02828-01181
IC102	TC4053BP	TOS	20-01572-20950	TR506	2SA1015-Y TPE2	TOS	20-02822-05402
IC103	TC4053BP	TOS	20-01572-20950	TR507	2SC1815-Y TPE2	TOS	20-02824-05702
IC104	TC4053BP	TOS	20-01572-20950	TR508	2SC1815-Y TPE2	TOS	20-02824-05702
IC401	AN5560	MAT	20-01004-05560	TR509	2SC1815-Y TPE2	TOS	20-02824-05702
IC501	TC4053BP	TOS	20-01572-20950	TR510	2SC1815-Y TPE2	TOS	20-02824-05702
IC502	TC4053BP	TOS	20-01572-20950	TR511	2SC1815-Y TPE2	TOS	20-02824-05702
IC503	TD4455	PHI	20-01573-64550	TR512	2SC1815-Y TPE2	TOS	20-02824-05702
IC601	TD43505	PHI	20-01573-63500	TR601	2SA1015-Y TPE2	TOS	20-02822-05402
IC602	TC4053BP	TOS	20-01572-20950	TR602	2SA1015-Y TPE2	TOS	20-02822-05402
IC603	TC4053BP	TOS	20-01572-20950	TR603	2SC1815-Y TPE2	TOS	20-02824-05702
IC701	TC4053BP	TOS	20-01572-20950	TR604	2SA1015-Y TPE2	TOS	20-02822-05402
IC702	TC4538BP	TOS	20-01572-26000	TR605	2SA1015-Y TPE2	TOS	20-02822-05402
IC703	TC4538BP	TOS	20-01572-26000	TR606	2SC1815-Y TPE2	TOS	20-02824-05702
IC704	μPD4011BC	NEC	20-01784-20400	TR607	2SA1015-Y TPE2	TOS	20-02822-05402
IC705	TC4538BP	TOS	20-01572-26000	TR608	2SC3790E/F	SYO	20-02824-15100
IC706	TC4081BP	TOS	20-01572-21010		OTH-126A-B	OSS	20-55518-05260
IC707	TC4053BP	TOS	20-01572-20950	TR609	2SC3790E/F	SYO	20-02824-15100
IC708	TC4538BP	TOS	20-01572-26000	TR610	2SA1480E	SYO	20-02822-11160
IC709	TC4538BP	TOS	20-01572-26000	TR611	2SA1015-Y TPE2	TOS	20-02822-05402
IC710	TC4013BP	TOS	20-01572-20620	TR612	2SC3790E/F	SYO	20-02824-15100
IC711	TC4520BP	TOS	20-01572-21800		OTH-126A-B	OSS	20-55518-05260
IC712	TC4013BP	TOS	20-01572-20620	TR613	2SC3790E/F	SYO	20-02824-15100
IC802	TD62504P	TOS	20-01573-01100	TR614	2SA1480E	SYO	20-02822-11160
IC803	TD62504P	TOS	20-01573-01100	TR615	2SA1015-Y TPE2	TOS	20-02822-05402
IC804	TL7705CPB	TEX	20-01574-01700	TR616	2SC3790E/F	SYO	20-02824-15100
IC901	HA11235	HIT	20-01211-00700		OTH-126A-B	OSS	20-55518-05260
IC902	NJM78M05A	JRC	20-01392-00400	TR617	2SC3790E/F	SYO	20-02824-15100
				TR618	2SA1480E	SYO	20-02822-11160
< TRANSISTORS >							
TR 1	2SC1815-Y TPE2	TOS	20-02824-05702	TR701	2SC1815-Y TPE2	TOS	20-02824-05702
TR 2	2SC1815-Y TPE2	TOS	20-02824-05702	TR702	2SA1015-Y TPE2	TOS	20-02822-05402
TR 3	2SC1815-Y TPE2	TOS	20-02824-05702	TR703	2SA1015-Y TPE2	TOS	20-02822-05402
TR 4	2SC1815-Y TPE2	TOS	20-02824-05702	TR704	2SC1815-Y TPE2	TOS	20-02824-05702
TR 5	2SC1815-Y TPE2	TOS	20-02824-05702	TR705	2SC1815-Y TPE2	TOS	20-02824-05702
TR 6	2SC1815-Y TPE2	TOS	20-02824-05702	TR706	2SC1815-Y TPE2	TOS	20-02824-05702
TR 7	2SC1815-Y TPE2	TOS	20-02824-05702	TR707	2SC1815-Y TPE2	TOS	20-02824-05702
TR 8	2SC1815-Y TPE2	TOS	20-02824-05702	TR708	2SC1815-Y TPE2	TOS	20-02824-05702
TR 9	2SC1815-Y TPE2	TOS	20-02824-05702	TR709	2SC1815-Y TPE2	TOS	20-02824-05702
TR 10	2SC1815-Y TPE2	TOS	20-02824-05702	TR710	2SC1815-Y TPE2	TOS	20-02824-05702
TR101	2SC1815-Y TPE2	TOS	20-02824-05702	TR711	2SC1815-Y TPE2	TOS	20-02824-05702
TR102	2SC1815-Y TPE2	TOS	20-02824-05702	TR712	2SA1015-Y TPE2	TOS	20-02822-05402
TR103	2SC1815-Y TPE2	TOS	20-02824-05702	TR713	2SC1815-Y TPE2	TOS	20-02824-05702
TR104	2SC2901	NEC	20-02824-08500	TR714	2SC1815-Y TPE2	TOS	20-02824-05702
TR105	2SC1815-Y TPE2	TOS	20-02824-05702	TR801	2SC1815-Y TPE2	TOS	20-02824-05702
TR106	2SC1815-Y TPE2	TOS	20-02824-05702	TR901	2SA1015-Y TPE2	TOS	20-02822-05402
TR107	2SC1815-Y TPE2	TOS	20-02824-05702	TR902	2SC1815-Y TPE2	TOS	20-02824-05702
TR108	2SC2901	NEC	20-02824-08500	TR903	2SK614	MAT	20-02828-03115
TR109	2SC1815-Y TPE2	TOS	20-02824-05702	TR904	2SK614	MAT	20-02828-03115
< DIODES >							
TR111	2SC1815-Y TPE2	TOS	20-02824-05702	D 1	1S1588 TPB2	TOS	20-03812-01201
TR112	2SC2901	NEC	20-02824-08500	D 2	1S1588 TPB2	TOS	20-03812-01201
TR201	2SC1815-Y TPE2	TOS	20-02824-05702	D 3	1S1588 TPB2	TOS	20-03812-01201
TR202	2SC1815-Y TPE2	TOS	20-02824-05702	D 4	1S1588 TPB2	TOS	20-03812-01201
TR203	2SC1815-Y TPE2	TOS	20-02824-05702	D 5	1S1588 TPB2	TOS	20-03812-01201
TR204	2SC1815-Y TPE2	TOS	20-02824-05702	D 6	1S1588 TPB2	TOS	20-03812-01201
TR205	2SC1815-Y TPE2	TOS	20-02824-05702	D 7	1S1588 TPB2	TOS	20-03812-01201
TR301	2SC1815-Y TPE2	TOS	20-02824-05702	D101	1S1588 TPB2	TOS	20-03812-01201
TR302	2SC1815-Y TPE2	TOS	20-02824-05702	D102	1S1588 TPB2	TOS	20-03812-01201
TR303	2SC1815-Y TPE2	TOS	20-02824-05702	D103	1S1588 TPB2	TOS	20-03812-01201
TR304	2SC1815-Y TPE2	TOS	20-02824-05702	D104	1S1588 TPB2	TOS	20-03812-01201
TR306	2SC1815-Y TPE2	TOS	20-02824-05702	D105	1S1588 TPB2	TOS	20-03812-01201
TR307	2SC1815-Y TPE2	TOS	20-02824-05702	D106	1S1588 TPB2	TOS	20-03812-01201
TR401	2SC1815-Y TPE2	TOS	20-02824-05702	D107	1S1588 TPB2	TOS	20-03812-01201
TR402	2SC1815-Y TPE2	TOS	20-02824-05702	D108	1S1588 TPB2	TOS	20-03812-01201
TR404	2SA1015-Y TPE2	TOS	20-02822-05402	D109	1S1588 TPB2	TOS	20-03812-01201
TR405	2SA1015-Y TPE2	TOS	20-02822-05402	D110	1S1588 TPB2	TOS	20-03812-01201
TR406	2SC1815-Y TPE2	TOS	20-02824-05702	D111	1S1588 TPB2	TOS	20-03812-01201
TR407	2SA1015-Y TPE2	TOS	20-02822-05402	D112	1S1588 TPB2	TOS	20-03812-01201
TR408	2SK614	MAT	20-02828-03115	D113	1S1588 TPB2	TOS	20-03812-01201
TR409	2SK614	MAT	20-02828-03115	D201	1S1588 TPB2	TOS	20-03812-01201
TR501	2SC1815-Y TPE2	TOS	20-02824-05702	D202	1S1588 TPB2	TOS	20-03812-01201
TR502	2SA1015-Y TPE2	TOS	20-02822-05402	D301	1S1588 TPB2	TOS	20-03812-01201

PARTS LIST-6

VIDEO BOARD

94058-15020 PP-904960 02 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< DIODES >							
D302	1S1588 TPB2	TOS	20-03812-01201	R 19	ERDS2TJ 101 T	MAT	20-12108-10113
D601	1S1588 TPB2	TOS	20-03812-01201	R 21	ERDS2TJ 473 T	MAT	20-12108-47313
D602	1S1588 TPB2	TOS	20-03812-01201	R 22	ERDS2TJ 473 T	MAT	20-12108-47313
D603	1S1588 TPB2	TOS	20-03812-01201	R 23	ERDS2TJ 473 T	MAT	20-12108-47313
D604	1S1588 TPB2	TOS	20-03812-01201	R 24	ERDS2TJ 101 T	MAT	20-12108-10113
D605	1S1588 TPB2	TOS	20-03812-01201	R 25	ERDS2TJ 473 T	MAT	20-12108-47313
D606	1S1588 TPB2	TOS	20-03812-01201	R 26	ERDS2TJ 222 T	MAT	20-12108-22213
D607	1S1588 TPB2	TOS	20-03812-01201	R 27	ERDS1VJ 100 T	MAT	20-12106-10033
D608	1S1588 TPB2	TOS	20-03812-01201	R 28	ERDS2TJ 473 T	MAT	20-12108-47313
D609	1S1588 TPB2	TOS	20-03812-01201	R 29	ERDS2TJ 101 T	MAT	20-12108-10113
D610	1S1588 TPB2	TOS	20-03812-01201	R 30	ERDS2TJ 473 T	MAT	20-12108-47313
D611	1S1588 TPB2	TOS	20-03812-01201	R 31	ERDS2TJ 222 T	MAT	20-12108-22213
D612	1S1588 TPB2	TOS	20-03812-01201	R 32	ERDS2TJ 473 T	MAT	20-12108-47313
D701	1S1588 TPB2	TOS	20-03812-01201	R 33	ERDS2TJ 101 T	MAT	20-12108-10113
D702	1S1588 TPB2	TOS	20-03812-01201	R 34	ERDS2TJ 473 T	MAT	20-12108-47313
D703	1S1588 TPB2	TOS	20-03812-01201	R 35	ERDS2TJ 222 T	MAT	20-12108-22213
D705	1S1588 TPB2	TOS	20-03812-01201	R 36	ERDS2TJ 103 T	MAT	20-12108-10313
D708	1S1588 TPB2	TOS	20-03812-01201	R 37	ERDS2TJ 103 T	MAT	20-12108-10313
D709	1S1588 TPB2	TOS	20-03812-01201	R 38	ERDS2TJ 103 T	MAT	20-12108-10313
D710	1S1588 TPB2	TOS	20-03812-01201	R 39	ERDS2TJ 333 T	MAT	20-12108-33313
D713	1S1588 TPB2	TOS	20-03812-01201	R 40	ERDS2TJ 473 T	MAT	20-12108-47313
D714	1S1588 TPB2	TOS	20-03812-01201	R 41	ERDS2TJ 473 T	MAT	20-12108-47313
D715	1S1588 TPB2	TOS	20-03812-01201	R 42	ERDS2TJ 333 T	MAT	20-12108-33313
D716	1S1588 TPB2	TOS	20-03812-01201	R 43	ERDS2TJ 473 T	MAT	20-12108-47313
D717	1S1588 TPB2	TOS	20-03812-01201	R 44	ERDS2TJ 473 T	MAT	20-12108-47313
D718	1S1588 TPB2	TOS	20-03812-01201	R 45	ERDS2TJ 222 T	MAT	20-12108-22213
D719	1S1588 TPB2	TOS	20-03812-01201	R 46	ERDS2TJ 473 T	MAT	20-12108-47313
D720	1S1588 TPB2	TOS	20-03812-01201	R 47	ERDS2TJ 473 T	MAT	20-12108-47313
D801	1S1588 TPB2	TOS	20-03812-01201	R101	ERDS2TJ 101 T	MAT	20-12108-10113
D802	1S1588 TPB2	TOS	20-03812-01201	R102	ERDS2TJ 473 T	MAT	20-12108-47313
D803	1S1588 TPB2	TOS	20-03812-01201	R103	ERDS2TJ 473 T	MAT	20-12108-47313
D804	1S1588 TPB2	TOS	20-03812-01201	R104	ERDS2TJ 473 T	MAT	20-12108-47313
D805	1S1588 TPB2	TOS	20-03812-01201	R105	ERDS2TJ 152 T	MAT	20-12108-15213
D806	1S1588 TPB2	TOS	20-03812-01201	R106	ERDS2TJ 222 T	MAT	20-12108-22213
D807	1S1588 TPB2	TOS	20-03812-01201	R107	ERDS2TJ 152 T	MAT	20-12108-15213
D808	1S1588 TPB2	TOS	20-03812-01201	R108	ERDS2TJ 222 T	MAT	20-12108-22213
D809	1S1588 TPB2	TOS	20-03812-01201	R109	ERDS2TJ 152 T	MAT	20-12108-15213
D810	1S1588 TPB2	TOS	20-03812-01201	R110	ERDS2TJ 101 T	MAT	20-12108-10113
D811	1S1588 TPB2	TOS	20-03812-01201	R111	ERDS2TJ 473 T	MAT	20-12108-47313
D812	1S1588 TPB2	TOS	20-03812-01201	R112	ERDS2TJ 473 T	MAT	20-12108-47313
D813	1S1588 TPB2	TOS	20-03812-01201	R113	ERDS2TJ 222 T	MAT	20-12108-22213
D814	1S1588 TPB2	TOS	20-03812-01201	R114	ERDS2TJ 473 T	MAT	20-12108-47313
D815	1S1588 TPB2	TOS	20-03812-01201	R115	ERDS2TJ 683 T	MAT	20-12108-68313
D816	MA700A	MAT	20-03363-00700	R116	ERDS2TJ 101 T	MAT	20-12108-10113
D817	1S1588 TPB2	TOS	20-03812-01201	R117	ERDS2TJ 472 T	MAT	20-12108-47213
D818	1S1588 TPB2	TOS	20-03812-01201	R118	ERDS2TJ 222 T	MAT	20-12108-22213
D819	1S1588 TPB2	TOS	20-03812-01201	R119	ERDS2TJ 103 T	MAT	20-12108-10313
D901	RD6.2EB	NEC	20-03513-01600	R120	ERDS1VJ 100 T	MAT	20-12106-10033
D902	RD7.5EB1	NEC	20-03513-01905	R121	ERDS2TJ 101 T	MAT	20-12108-10113
D903	RD12EB1	NEC	20-03513-02505	R122	ERDS2TJ 473 T	MAT	20-12108-47313
D904	1S1588 TPB2	TOS	20-03812-01201	R123	ERDS2TJ 473 T	MAT	20-12108-47313
D905	1S1588 TPB2	TOS	20-03812-01201	R124	ERDS2TJ 152 T	MAT	20-12108-15213
D906	V06C	HIT	20-03631-00200	R125	ERDS2TJ 222 T	MAT	20-12108-22213
D907	1S1588 TPB2	TOS	20-03812-01201	R126	ERDS2TJ 332 T	MAT	20-12108-33213
D908	1S1588 TPB2	TOS	20-03812-01201	R127	ERDS2TJ 222 T	MAT	20-12108-22213
< RESISTORS >							
R 1	ERDS2TJ 473 T	MAT	20-12108-47313	R131	ERDS2TJ 473 T	MAT	20-12108-47313
R 2	ERDS2TJ 101 T	MAT	20-12108-10113	R132	ERDS2TJ 222 T	MAT	20-12108-22213
R 3	ERDS2TJ 473 T	MAT	20-12108-47313	R133	ERDS2TJ 683 T	MAT	20-12108-68313
R 4	ERDS2TJ 222 T	MAT	20-12108-22213	R134	ERDS2TJ 101 T	MAT	20-12108-10113
R 5	ERDS2TJ 473 T	MAT	20-12108-47313	R135	ERDS2TJ 472 T	MAT	20-12108-47213
R 6	ERDS2TJ 101 T	MAT	20-12108-10113	R136	ERDS2TJ 222 T	MAT	20-12108-22213
R 7	ERDS2TJ 473 T	MAT	20-12108-47313	R137	ERDS2TJ 103 T	MAT	20-12108-10313
R 8	ERDS2TJ 222 T	MAT	20-12108-22213	R138	ERDS2TJ 101 T	MAT	20-12108-10113
R 9	ERDS2TJ 473 T	MAT	20-12108-47313	R139	ERDS2TJ 473 T	MAT	20-12108-47313
R 10	ERDS2TJ 101 T	MAT	20-12108-10113	R140	ERDS2TJ 473 T	MAT	20-12108-47313
R 11	ERDS2TJ 473 T	MAT	20-12108-47313	R141	ERDS2TJ 152 T	MAT	20-12108-15213
R 12	ERDS2TJ 222 T	MAT	20-12108-22213	R142	ERDS2TJ 222 T	MAT	20-12108-22213
R 13	ERDS2TJ 750 T	MAT	20-12108-75013	R143	ERDS2TJ 102 T	MAT	20-12108-10213
R 14	ERDS2TJ 750 T	MAT	20-12108-75013	R144	ERDS2TJ 152 T	MAT	20-12108-15213
R 15	ERDS2TJ 473 T	MAT	20-12108-47313	R145	ERDS2TJ 222 T	MAT	20-12108-22213
R 16	ERDS2TJ 101 T	MAT	20-12108-10113	R146	ERDS2TJ 101 T	MAT	20-12108-10113
R 17	ERDS2TJ 473 T	MAT	20-12108-47313	R147	ERDS2TJ 473 T	MAT	20-12108-47313
R 18	ERDS2TJ 222 T	MAT	20-12108-22213	R148	ERDS2TJ 473 T	MAT	20-12108-47313

VIDEO BOARD

94058-15020 PP-904960 03 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< RESISTORS >							
R149	ERDS2TJ 222 T	MAT	20-12108-22213	R511	ERDS2TJ 223 T	MAT	20-12108-22313
R150	ERDS2TJ 683 T	MAT	20-12108-68313	R512	ERDS2TJ 683 T	MAT	20-12108-68313
R151	ERDS2TJ 101 T	MAT	20-12108-10113	* R513			
R152	ERDS2TJ 472 T	MAT	20-12108-47213	R514	ERDS2TJ 331 T	MAT	20-12108-33113
R153	ERDS2TJ 222 T	MAT	20-12108-22213	R515	ERDS2TJ 560 T	MAT	20-12108-56013
R154	ERDS2TJ 472 T	MAT	20-12108-47213	R516	ERDS2TJ 223 T	MAT	20-12108-22313
R155	ERDS2TJ 102 T	MAT	20-12108-10213	R517	ERDS2TJ 333 T	MAT	20-12108-33313
R201	ERDS2TJ 101 T	MAT	20-12108-10113	R518	ERDS2TJ 331 T	MAT	20-12108-33113
R202	ERDS2TJ 331 T	MAT	20-12108-33113	R519	ERDS2TJ 331 T	MAT	20-12108-33113
R203	ERDS2TJ 101 T	MAT	20-12108-10113	R520	ERDS2TJ 220 T	MAT	20-12108-22013
R204	ERDS2TJ 222 T	MAT	20-12108-22213	R521	ERDS2TJ 223 T	MAT	20-12108-22313
R205	ERDS2TJ 331 T	MAT	20-12108-33113	R522	ERDS2TJ 683 T	MAT	20-12108-68313
R206	ERDS2TJ 152 T	MAT	20-12108-15213	R523	ERDS2TJ 471 T	MAT	20-12108-47113
R207	ERDS2TJ 473 T	MAT	20-12108-47313	R524	ERDS1VJ 100 T	MAT	20-12106-10033
R208	ERDS2TJ 103 T	MAT	20-12108-10313	R525	ERDS2TJ 103 T	MAT	20-12108-10313
R209	ERDS2TJ 103 T	MAT	20-12108-10313	R526	ERDS2TJ 472 T	MAT	20-12108-47213
R210	ERDS2TJ 221 T	MAT	20-12108-22113	R527	ERDS2TJ 103 T	MAT	20-12108-10313
R211	ERDS2TJ 470 T	MAT	20-12108-47013	R528	ERDS2TJ 472 T	MAT	20-12108-47213
R212	ERDS2TJ 152 T	MAT	20-12108-15213	R529	ERDS1VJ 100 T	MAT	20-12106-10033
R213	ERDS2TJ 472 T	MAT	20-12108-47213	R530	ERDS2TJ 203 T	MAT	20-12108-20313
R214	ERDS2TJ 471 T	MAT	20-12108-47113	R531	ERDS2TJ 472 T	MAT	20-12108-47213
R215	ERDS2TJ 471 T	MAT	20-12108-47113	R532	ERDS2TJ 562 T	MAT	20-12108-56213
R216	ERDS2TJ 152 T	MAT	20-12108-15213	R533	ERDS2TJ 103 T	MAT	20-12108-10313
R217	ERDS2TJ 153 T	MAT	20-12108-15313	R534	ERDS2TJ 103 T	MAT	20-12108-10313
R218	ERDS2TJ 472 T	MAT	20-12108-47213	R535	ERDS2TJ 472 T	MAT	20-12108-47213
R220	ERDS2TJ 102 T	MAT	20-12108-10213	R536	ERDS2TJ 103 T	MAT	20-12108-10313
R301	ERDS2TJ 101 T	MAT	20-12108-10113	R537	ERDS2TJ 103 T	MAT	20-12108-10313
R302	ERDS2TJ 473 T	MAT	20-12108-47313	R538	ERDS2TJ 473 T	MAT	20-12108-47313
R303	ERDS2TJ 103 T	MAT	20-12108-10313	R539	ERDS2TJ 821 T	MAT	20-12108-82113
R304	ERDS2TJ 103 T	MAT	20-12108-10313	R540	ERDS2TJ 101 T	MAT	20-12108-10113
R305	ERDS2TJ 152 T	MAT	20-12108-15213	R541	ERDS2TJ 102 T	MAT	20-12108-10213
R306	ERDS2TJ 221 T	MAT	20-12108-22113	R542	ERDS2TJ 104 T	MAT	20-12108-10413
R307	ERDS2TJ 470 T	MAT	20-12108-47013	R601	ERDS1VJ 100 T	MAT	20-12106-10033
R308	ERDS2TJ 152 T	MAT	20-12108-15213	R602	ERDS2TJ 473 T	MAT	20-12108-47313
R309	ERDS2TJ 222 T	MAT	20-12108-22213	R603	ERDS2TJ 103 T	MAT	20-12108-10313
R310	ERDS2TJ 223 T	MAT	20-12108-22313	R604	ERDS2TJ 182 T	MAT	20-12108-18213
R311	ERDS2TJ 223 T	MAT	20-12108-22313	R605	ERDS2TJ 203 T	MAT	20-12108-20313
R313	ERDS2TJ 102 T	MAT	20-12108-10213	R606	ERDS2TJ 472 T	MAT	20-12108-47213
R320	ERDS2TJ 101 T	MAT	20-12108-10113	R607	ERDS2TJ 203 T	MAT	20-12108-20313
R321	ERDS2TJ 473 T	MAT	20-12108-47313	R608	ERDS2TJ 472 T	MAT	20-12108-47213
R322	ERDS2TJ 473 T	MAT	20-12108-47313	R609	ERDS2TJ 473 T	MAT	20-12108-47313
R323	ERDS2TJ 472 T	MAT	20-12108-47213	R610	ERDS2TJ 224 T	MAT	20-12108-22413
R324	ERDS2TJ 561 T	MAT	20-12108-56113	R611	ERDS2TJ 103 T	MAT	20-12108-10313
R325	ERDS2TJ 682 T	MAT	20-12108-68213	R612	ERDS2TJ 562 T	MAT	20-12108-56213
R326	ERDS2TJ 332 T	MAT	20-12108-33213	R613	ERDS2TJ 562 T	MAT	20-12108-56213
R327	ERDS2TJ 561 T	MAT	20-12108-56113	R614	ERDS2TJ 333 T	MAT	20-12108-33313
R328	ERDS2TJ 153 T	MAT	20-12108-15313	R615	ERDS2TJ 222 T	MAT	20-12108-22213
R329	ERDS2TJ 472 T	MAT	20-12108-47213	R616	ERDS2TJ 222 T	MAT	20-12108-22213
R331	ERDS2TJ 102 T	MAT	20-12108-10213	R617	ERDS2TJ 153 T	MAT	20-12108-15313
R332	ERDS2TJ 391 T	MAT	20-12108-39113	R618	ERDS2TJ 153 T	MAT	20-12108-15313
R333	RN26C 2E 1200QFT	KOA	20-10355-12211	R619	ERDS2TJ 153 T	MAT	20-12108-15313
R334	RN26C 2E 180QFT	KOA	20-10355-18111	R620	ERDS2TJ 473 T	MAT	20-12108-47313
R336	RN26C 2E 43KQFT	KOA	20-10355-43311	R621	ERDS2TJ 473 T	MAT	20-12108-47313
R401	ERDS2TJ 103 T	MAT	20-12108-10313	R622	ERDS2TJ 101 T	MAT	20-12108-10113
R402	ERDS2TJ 103 T	MAT	20-12108-10313	R623	ERDS2TJ 101 T	MAT	20-12108-10113
R403	ERDS2TJ 103 T	MAT	20-12108-10313	R624	ERDS2TJ 472 T	MAT	20-12108-47213
R404	ERDS2TJ 103 T	MAT	20-12108-10313	R625	ERDS2TJ 472 T	MAT	20-12108-47213
R408	ERDS2TJ 103 T	MAT	20-12108-10313	R626	ERDS2TJ 472 T	MAT	20-12108-47213
R409	ERDS2TJ 222 T	MAT	20-12108-22213	R627	ERDS2TJ 473 T	MAT	20-12108-47313
R410	ERDS2TJ 472 T	MAT	20-12108-47213	R628	ERDS2TJ 472 T	MAT	20-12108-47213
R411	ERDS2TJ 222 T	MAT	20-12108-22213	R629	ERDS2TJ 153 T	MAT	20-12108-15313
R412	ERDS2TJ 473 T	MAT	20-12108-47313	R630	ERDS2TJ 473 T	MAT	20-12108-47313
R413	ERDS2TJ 473 T	MAT	20-12108-47313	R631	ERDS2TJ 472 T	MAT	20-12108-47213
R414	ERDS2TJ 103 T	MAT	20-12108-10313	R632	ERDS2TJ 153 T	MAT	20-12108-15313
R415	ERDS2TJ 473 T	MAT	20-12108-47313	R633	ERDS2TJ 473 T	MAT	20-12108-47313
R416	ERDS2TJ 103 T	MAT	20-12108-10313	R634	ERDS2TJ 472 T	MAT	20-12108-47213
R501	ERDS2TJ 101 T	MAT	20-12108-10113	R635	ERDS2TJ 153 T	MAT	20-12108-15313
R502	ERDS2TJ 222 T	MAT	20-12108-22213	R636	ERDS2TJ 472 T	MAT	20-12108-47213
R503	ERDS2TJ 152 T	MAT	20-12108-15213	R637	ERDS2TJ 103 T	MAT	20-12108-10313
R504	ERDS2TJ 152 T	MAT	20-12108-15213	R638	ERDS2TJ 472 T	MAT	20-12108-47213
R505	ERDS2TJ 473 T	MAT	20-12108-47313	R639	ERDS2TJ 561 T	MAT	20-12108-56113
R506	ERDS2TJ 473 T	MAT	20-12108-47313	R640	ERDS2TJ 561 T	MAT	20-12108-56113
R507	ERDS2TJ 681 T	MAT	20-12108-68113	R641	ERDS2TJ 681 T	MAT	20-12108-68113
R508	ERDS2TJ 681 T	MAT	20-12108-68113	R642	ERDS2TJ 152 T	MAT	20-12108-15213
R509	ERDS2TJ 101 T	MAT	20-12108-10113	R643	ERDS2TJ 101 T	MAT	20-12108-10113
R510	ERDS2TJ 472 T	MAT	20-12108-47213	R645	ERDS1VJ 100 T	MAT	20-12106-10033

PARTS LIST -8

VIDEO BOARD

94058-15020 PP-904960 04 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< RESISTORS >							
R646	ERDS2TJ 471 T	MAT	20-12108-47113	R749	ERDS2TJ 101 T	MAT	20-12108-10113
R647	ERDS2TJ 471 T	MAT	20-12108-47113	R750	ERDS2TJ 104 T	MAT	20-12108-10413
R648	ERDS2TJ 152 T	MAT	20-12108-15213	R751	ERDS2TJ 103 T	MAT	20-12108-10313
R649	ERDS2TJ 102 T	MAT	20-12108-10213	R752	ERDS2TJ 472 T	MAT	20-12108-47213
R650	ERG-2SJ 682	MAT	20-11019-68243	R753	RN26C 2E 150KQFT	KOA	20-10355-15411
R651	ERDS2TJ 102 T	MAT	20-12108-10213	R754	RN26C 2E 33KQFT	KOA	20-10355-33311
R652	ERG-2SJ 223	MAT	20-11019-22343	R755	ERDS2TJ 104 T	MAT	20-12108-10413
R653	ERDS2TJ 563 T	MAT	20-12108-56313	R756	ERDS2TJ 103 T	MAT	20-12108-10313
R654	ERDS2TJ 333 T	MAT	20-12108-33313	R757	ERDS1VJ 100 T	MAT	20-12108-10033
R655	ERDS2TJ 471 T	MAT	20-12108-47113	R801	ERDS2TJ 101 T	MAT	20-12108-10113
R656	ERDS2TJ 471 T	MAT	20-12108-47113	R802	ERDS2TJ 103 T	MAT	20-12108-10313
R657	ERDS2TJ 152 T	MAT	20-12108-15213	R803	ERDS2TJ 103 T	MAT	20-12108-10313
R658	ERDS2TJ 102 T	MAT	20-12108-10213	R804	ERDS2TJ 103 T	MAT	20-12108-10313
R659	ERG-2SJ 682	MAT	20-11019-68243	R805	ERDS2TJ 103 T	MAT	20-12108-10313
R660	ERDS2TJ 102 T	MAT	20-12108-10213	R806	ERDS2TJ 222 T	MAT	20-12108-22213
R661	ERG-2SJ 223	MAT	20-11019-22343	R807	ERDS2TJ 153 T	MAT	20-12108-15313
R662	ERDS2TJ 563 T	MAT	20-12108-56313	R812	ERDS2TJ 102 T	MAT	20-12108-10213
R663	ERDS2TJ 333 T	MAT	20-12108-33313	R814	ERDS2TJ 102 T	MAT	20-12108-10213
R664	ERDS2TJ 471 T	MAT	20-12108-47113	R815	ERDS2TJ 102 T	MAT	20-12108-10213
R665	ERDS2TJ 471 T	MAT	20-12108-47113	R816	ERDS2TJ 102 T	MAT	20-12108-10213
R666	ERDS2TJ 152 T	MAT	20-12108-15213	R817	ERDS2TJ 102 T	MAT	20-12108-10213
R667	ERDS2TJ 102 T	MAT	20-12108-10213	R818	ERDS2TJ 103 T	MAT	20-12108-10313
R668	ERG-2SJ 682	MAT	20-11019-68243	R819	ERDS2TJ 103 T	MAT	20-12108-10313
R669	ERDS2TJ 102 T	MAT	20-12108-10213	R820	ERDS2TJ 103 T	MAT	20-12108-10313
R670	ERG-2SJ 223	MAT	20-11019-22343	R821	ERDS2TJ 472 T	MAT	20-12108-47213
R671	ERDS2TJ 563 T	MAT	20-12108-56313	R822	ERDS2TJ 101 T	MAT	20-12108-10113
R672	ERDS2TJ 333 T	MAT	20-12108-33313	R823	ERDS2TJ 101 T	MAT	20-12108-10113
R673	ERDS2TJ 331 T	MAT	20-12108-33113	R824	ERDS2TJ 101 T	MAT	20-12108-10113
R674	ERDS2TJ 331 T	MAT	20-12108-33113	R825	ERDS2TJ 101 T	MAT	20-12108-10113
R675	ERDS2TJ 331 T	MAT	20-12108-33113	R826	ERDS2TJ 101 T	MAT	20-12108-10113
R701	ERDS2TJ 101 T	MAT	20-12108-10113	R827	ERDS2TJ 101 T	MAT	20-12108-10113
R702	ERDS2TJ 473 T	MAT	20-12108-47313	R828	ERDS2TJ 101 T	MAT	20-12108-10113
R703	ERDS2TJ 103 T	MAT	20-12108-10313	R829	ERDS2TJ 101 T	MAT	20-12108-10113
R704	ERDS2TJ 102 T	MAT	20-12108-10213	R830	ERDS2TJ 101 T	MAT	20-12108-10113
R705	ERDS2TJ 331 T	MAT	20-12108-33113	R831	ERDS2TJ 101 T	MAT	20-12108-10113
R706	ERDS2TJ 152 T	MAT	20-12108-15213	R832	ERDS2TJ 101 T	MAT	20-12108-10113
R707	ERDS2TJ 222 T	MAT	20-12108-22213	R901	ERDS1VJ 101 T	MAT	20-12106-10123
R708	ERDS2TJ 331 T	MAT	20-12108-33113	R902	ERDS2TJ 222 T	MAT	20-12108-22213
R709	ERDS2TJ 331 T	MAT	20-12108-33113	R903	ERDS2TJ 473 T	MAT	20-12108-47313
R710	ERDS2TJ 474 T	MAT	20-12108-47413	R904	ERDS2TJ 473 T	MAT	20-12108-47313
R711	ERDS2TJ 332 T	MAT	20-12108-33213	R905	ERDS2TJ 153 T	MAT	20-12108-15313
R712	ERDS2TJ 102 T	MAT	20-12108-10213	R906	ERDS2TJ 472 T	MAT	20-12108-47213
R713	ERDS2TJ 101 T	MAT	20-12108-10113	R907	ERDS2TJ 683 T	MAT	20-12108-68313
R714	ERDS2TJ 473 T	MAT	20-12108-47313	R909	ERDS2TJ 822 T	MAT	20-12108-82213
R715	ERDS2TJ 103 T	MAT	20-12108-10313	R910	ERDS2TJ 102 T	MAT	20-12108-10213
R716	ERDS2TJ 472 T	MAT	20-12108-47213	R911	ERDS2TJ 681 T	MAT	20-12108-68113
R717	ERDS2TJ 472 T	MAT	20-12108-47213	* R912	ERDS2TJ 103 T	MAT	20-12108-10313
R718	RN26C 2E 39KQFT	KOA	20-10355-39311	R914	ERDS2TJ 682 T	MAT	20-12108-68213
R719	ERDS2TJ 473 T	MAT	20-12108-47313	R915	ERDS2TJ 682 T	MAT	20-12108-68213
R720	ERDS2TJ 333 T	MAT	20-12108-33313	R916	ERDS2TJ 473 T	MAT	20-12108-47313
R721	ERDS2TJ 154 T	MAT	20-12108-15413	R917	ERDS2TJ 472 T	MAT	20-12108-47213
R722	ERDS2TJ 103 T	MAT	20-12108-10313	R918	ERDS1VJ 101 T	MAT	20-12106-10123
R723	ERDS2TJ 473 T	MAT	20-12108-47313	R919	ERDS2TJ 472 T	MAT	20-12108-47213
R724	ERDS1VJ 100 T	MAT	20-12106-10033	R920	ERDS2TJ 103 T	MAT	20-12108-10313
R725	RN26C 2E 33KQFT	KOA	20-10355-33311	R921	ERDS2TJ 103 T	MAT	20-12108-10313
R726	RN26C 2E 24KQFT	KOA	20-10355-24311	R922	ERDS2TJ 103 T	MAT	20-12108-10313
R727	ERDS2TJ 102 T	MAT	20-12108-10213	R923	ERDS2TJ 102 T	MAT	20-12108-10213
R729	ERDS2TJ 682 T	MAT	20-12108-68213	R924	ERDS2TJ 101 T	MAT	20-12108-10113
R730	ERDS2TJ 682 T	MAT	20-12108-68213	R925	ERDS2TJ 332 T	MAT	20-12108-33213
R731	ERDS2TJ 472 T	MAT	20-12108-47213	R926	ERDS2TJ 103 T	MAT	20-12108-10313
R733	ERDS2TJ 393 T	MAT	20-12108-39313	R927	ERDS2TJ 103 T	MAT	20-12108-10313
R734	RN26C 2E 68KQFT	KOA	20-10355-68311	R928	ERDS2TJ 220 T	MAT	20-12108-22013
R735	ERDS2TJ 104 T	MAT	20-12108-10413	R930	ERDS2TJ 103 T	MAT	20-12108-10313
R736	ERDS2TJ 102 T	MAT	20-12108-10213	R932	ERDS2TJ 103 T	MAT	20-12108-10313
R737	ERDS2TJ 682 T	MAT	20-12108-68213	R933	ERDS2TJ 681 T	MAT	20-12108-68113
R738	ERDS2TJ 682 T	MAT	20-12108-68213	R934	ERDS2TJ 222 T	MAT	20-12108-22213
R739	ERDS2TJ 472 T	MAT	20-12108-47213	R936	ERX-1SJ 4R7	MAT	20-11020-04733
R740	ERDS2TJ 103 T	MAT	20-12108-10313	VR101	RG-06UT2 5KΩ	COS	20-15549-50200
R741	ERDS2TJ 472 T	MAT	20-12108-47213	VR102	RG-06UT2 100Ω	COS	20-15549-10100
R742	ERDS2TJ 222 T	MAT	20-12108-22213	VR103	RG-06UT2 2KΩ	COS	20-15549-20200
R743	ERDS2TJ 222 T	MAT	20-12108-22213	VR104	RG-06UT2 100Ω	COS	20-15549-10100
R744	ERDS2TJ 222 T	MAT	20-12108-22213	VR105	RG-06UT2 2KΩ	COS	20-15549-20200
R745	ERDS2TJ 332 T	MAT	20-12108-33213	VR106	RG-06UT2 100Ω	COS	20-15549-10100
R746	ERDS2TJ 101 T	MAT	20-12108-10113	VR201	RG-06UT2 1KΩ	COS	20-15549-10200
R747	ERDS2TJ 104 T	MAT	20-12108-10413	VR202	RG-06UT2 1KΩ	COS	20-15549-10200
R748	ERDS2TJ 222 T	MAT	20-12108-22213				

VIDEO BOARD

94058-15020 PP-904960 05 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< RESISTORS >							
VR301	RG-06UT2 1KΩ	COS	20-15549-10200	C401	ECQ-B 1H102JZ4	MAT	20-22136-10250
VR303	RG-06UT2 200Ω	COS	20-15549-20100	C402	ECQ-B 1H102JZ4	MAT	20-22136-10250
VR401	RG-06UT2 1KΩ	COS	20-15549-10200	C403	ECEA 1EU470 B	MAT	20-20123-47625
VR501	RG-06UT2 2KΩ	COS	20-15549-20200	C404	ECEA 2AU0R47 B	MAT	20-20123-47472
VR502	RG-06UT2 5KΩ	COS	20-15549-50200	C501	ECEA 1EU470 B	MAT	20-20123-47625
VR503	RG-06UT2 5KΩ	COS	20-15549-50200	* C502			
VR601	RG-06UT2 10KΩ	COS	20-15549-10300	C503	RT-HE40 TKSL 470K	KCK	20-24518-47050
* VR703				C504	ECEA 1EU470 B	MAT	20-20123-47625
* VR705				C505	RT-HE40 TKSL 620K	KCK	20-24518-62050
VR901	RG-06UT2 5KΩ	COS	20-15549-50200	* C506			
VR902	RG-06UT2 5KΩ	COS	20-15549-50200	C507	ECQ-B 1H102JZ4	MAT	20-22136-10250
VR903	RG-06UT2 5KΩ	COS	20-15549-50200	C508	ECEA 1EU470 B	MAT	20-20123-47625
VR904	RG-06UT2 10KΩ	COS	20-15549-10300	C509	RT-DSKC85TK YF 104Z	KCK	20-24518-10425
VR905	RG-06UT2 100Ω	COS	20-15549-10100	C510	ECEA 1EU471 B	MAT	20-20123-47725
VR906	RG-06UT2 100Ω	COS	20-15549-10100	C511	ECQ-B 1H223JZ4	MAT	20-22136-22350
VR907	RG-06UT2 500Ω	COS	20-15549-50100	* C512			
VR908	RG-06UT2 10KΩ	COS	20-15549-10300	* C513			
TH901	ERT-D 3FHL 402S	MAT	20-19005-00100	C514	RT-DSKC85TK YF 104Z	KCK	20-24518-10425
< CAPACITORS >							
C 1	ECEA 1JU100 B	MAT	20-20123-10663	C515	ECEA 1EU471 B	MAT	20-20123-47725
C 2	ECEA 1JU100 B	MAT	20-20123-10663	C516	ECEA 2AU010 B	MAT	20-20123-10572
C 3	ECEA 1JU100 B	MAT	20-20123-10663	C517	ECQ-B 1H103JZ4	MAT	20-22136-10350
C 4	ECEA 1JU100 B	MAT	20-20123-10663	C518	ECQ-V 1H473JZ2	MAT	20-22137-47350
C 5	ECEA 1JU100 B	MAT	20-20123-10663	* C519	ECEA 2AU0R47 B	MAT	20-20123-47472
C 6	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C520	ECQ-B 1H223JZ4	MAT	20-22136-22350
C 7	ECEA 1EU101 B	MAT	20-20123-10725	C521	ECQ-B 1H223JZ4	MAT	20-22136-22350
C 8	ECEA 1JU100 B	MAT	20-20123-10663	* C524			
C 9	ECEA 1JU100 B	MAT	20-20123-10663	* C525			
C 10	ECEA 1JU100 B	MAT	20-20123-10663	C526	RT-HE70-TKSL 241K	KCK	20-24518-24150
C101	ECEA 1EU470 B	MAT	20-20123-47625	C527	RT-HE40 TKSL 100K	KCK	20-24518-10050
* C102				C528	RT-HE40 TKSL 100K	KCK	20-24518-10050
C103	ECEA 1EU470 B	MAT	20-20123-47625	C529	RT-HE40 TKSL 120K	KCK	20-24518-12050
C104	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C601	RT-DSKC85TK YF 104Z	KCK	20-24518-10425
C105	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C602	ECEA 1EU221 B	MAT	20-20123-22725
C106	ECEA 1EU101 B	MAT	20-20123-10725	C603	ECQ-B 1H223JZ4	MAT	20-22136-22350
C107	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C604	ECQ-B 1H223JZ4	MAT	20-22136-22350
C108	ECEA 1EU101 B	MAT	20-20123-10725	C605	ECQ-B 1H223JZ4	MAT	20-22136-22350
C109	ECEA 1EU470 B	MAT	20-20123-47625	C606	ECQ-B 1H223JZ4	MAT	20-22136-22350
C110	RT-HE40 TKSL 020C	KCK	20-24518-02050	C607	ECQ-B 1H223JZ4	MAT	20-22136-22350
C111	ECEA 1EU470 B	MAT	20-20123-47625	C608	ECQ-B 1H223JZ4	MAT	20-22136-22350
C112	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C609	ECEA 2AU0R47 B	MAT	20-20123-47472
C113	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C610	ECEA 2AU0R47 B	MAT	20-20123-47472
C114	ECEA 1EU101 B	MAT	20-20123-10725	C611	ECQ-B 1H223JZ4	MAT	20-22136-22350
C115	ECEA 1EU470 B	MAT	20-20123-47625	C612	ECQ-B 1H223JZ4	MAT	20-22136-22350
* C116				C613	ECQ-B 1H223JZ4	MAT	20-22136-22350
C117	ECEA 1EU470 B	MAT	20-20123-47625	C614	ECEA 2AU010 B	MAT	20-20123-10572
C118	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C615	ECEA 1EU330 B	MAT	20-20123-33625
C119	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C616	ECQ-B 1H223JZ4	MAT	20-22136-22350
C120	ECEA 1EU101 B	MAT	20-20123-10725	C617	ECQ-B 1H223JZ4	MAT	20-22136-22350
C201	RT-HE60 TKSL 181K	KCK	20-24518-18150	C618	ECQ-B 1H223JZ4	MAT	20-22136-22350
C202	ECEA 1EU470 B	MAT	20-20123-47625	C619	ECQ-B 1H223JZ4	MAT	20-22136-22350
C203	ECEA 1JU100 B	MAT	20-20123-10663	C620	NP 2D 101J T	TYO	20-22393-10177
C204	RT-HE60 TKSL 181K	KCK	20-24518-18150	C621	ECEA 2AU010 B	MAT	20-20123-10572
C205	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C622	ECEA 2AU0R47 B	MAT	20-20123-47472
C206	RT-HE40 TKSL 750K	KCK	20-24518-75050	C623	ECEA 1HN010S B	MAT	20-20123-10550
C207	RT-HE40 TKSL 750K	KCK	20-24518-75050	C624	ECEA 2AU010 B	MAT	20-20123-10572
C208	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	C626	ECEA 2DU330W	MAT	20-20125-33677
C209	RT-HE60 TKSL 181K	KCK	20-24518-18150	C627	ECQ-B 2104KF	MAT	20-22129-10478
C210	RT-HE40 TKSL 750K	KCK	20-24518-75050	C628	ECEA 1EU101 B	MAT	20-20123-10725
C211	NP 2D 121J T	TYO	20-22393-12177	C630	RT-DSKC85TK YF 104Z	KCK	20-24518-10425
C212	ECEA 1EU470 B	MAT	20-20123-47625	C631	RT-HE40 TKSL 220K	KCK	20-24518-22050
C301	RT-HE40 TKSL 470K	KCK	20-24518-47050	C632	ECQ-B 1H332JZ4	MAT	20-22136-33250
C302	RT-HE40 TKSL 470K	KCK	20-24518-47050	C633	ECQ-B 1H222JZ4	MAT	20-22136-22250
C303	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	* C634			
C304	ECEA 1EU470 B	MAT	20-20123-47625	* C635			
C307	ECEA 1EU470 B	MAT	20-20123-47625	C636	NP 2D 101J T	TYO	20-22393-10177
C309	RT-HE40 TKSL 270K	KCK	20-24518-27050	C637	RT-HE40 TKSL 270K	KCK	20-24518-27050
C310	RT-HE70-TKSL 241K	KCK	20-24518-24150	C638	ECQ-B 1H332JZ4	MAT	20-22136-33250
C311	RT-HE40 TKSL 300K	KCK	20-24518-30050	C639	ECQ-B 1H222JZ4	MAT	20-22136-22250
C312	RT-HE40 TKSL 390K	KCK	20-24518-39050	* C640			
C313	ECQ-B 1H103JZ4	MAT	20-22136-10350	* C641			
C315	ECQ-B 1H103JZ4	MAT	20-22136-10350	C642	NP 2D 101J T	TYO	20-22393-10177
C317	ECQ-B 1H103JZ4	MAT	20-22136-10350	C643	RT-HE40 TKSL 270K	KCK	20-24518-27050
				C644	ECQ-B 1H332JZ4	MAT	20-22136-33250
				* C645			
				* C646			
				C647	NP 2D 101J T	TYO	20-22393-10177

VIDEO BOARD

94058-15020 PP-904960 06 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< CAPACITORS >				< INDUCTANCE COILS >			
C648	ECQ-B 1H222JZ4	MAT	20-22136-22250	L305	LF5.0ST26 8R2K	KOA	20-40332-08200
C649	ECQ-B 1H333JZ4	MAT	20-22136-33350	L306	P-8R2	SUD	20-40451-08200
C650	ECQ-B 1H333JZ4	MAT	20-22136-33350	L501	LF5.0ST26 100K	KOA	20-40332-10000
C651	ECQ-B 1H333JZ4	MAT	20-22136-33350	L502	LF5.0ST26 3R3K	KOA	20-40332-03300
C701	ECEA 1JU100 B	MAT	20-20123-10663	L601	LF5.0ST26 3R9K	KOA	20-40332-03900
C702	RT-HE40 TKSL 750K	KCK	20-24518-75050	L602	LF5.0ST26 3R9K	KOA	20-40332-03900
C703	ECQ-B 1H333JZ4	MAT	20-22136-33350	L603	LF5.0ST26 3R9K	KOA	20-40332-03900
C704	ECEA 2AU0R47 B	MAT	20-20123-47472	L801	LHL08TB 101K	TYC	20-40335-10100
C705	RT-HE40 TKSL 680K	KCK	20-24518-68050	< FILTERS >			
C706	NP 2D 102J T	TYO	20-22393-10277	FL201	UGL-312BNT	SWC	20-43602-03120
C707	NP 2D 221J T	TYO	20-22393-22177	< DELAY LINES >			
C708	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	DL301	EFD-EN645A11	MAT	20-44121-00200
C709	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	DL501	ELT-10Z214M	MAT	20-44122-00300
C710	ECEA 1EU101 B	MAT	20-20123-10725	DL502	CN-100	SWC	20-44062-00100
C711	NP 2D 101J T	TYO	20-22393-10177	< CRYSTALS >			
C712	NP 2D 221J T	TYO	20-22393-22177	X201	HC-49/U	KDS	20-45006-00110
C714	NP 2D 471J T	TYO	20-22393-47177	X301	HC-49/U	KDS	20-45006-00111
C715	NP 2D 101J T	TYO	20-22393-10177	X801	CST4.00MGW	MUR	20-45023-00040
C716	RT-HE40 TKSL 750K	KCK	20-24518-75050	< SWITCHES >			
C717	ECQ-B 1H682JZ4	MAT	20-22136-68250	S 1	00220658	TKR	20-36002-03600
C718	NP 2D 471J T	TYO	20-22393-47177	S501	SS-12SBP2	NKA	20-36002-02300
C719	NP 2D 101J T	TYO	20-22393-10177	< CONNECTORS >			
C720	NP 2D 102J T	TYO	20-22393-10277	CN301	ST-902480	EMD	20-30995-24800
C721	ECEA 2AU010 B	MAT	20-20123-10572	CN306	DF1-5P-2.5DSA	HIR	20-30079-00500
C722	ECQ-B 1H103JZ4	MAT	20-22136-10350	DF1-SP		HIR	20-30079-00010
C723	ECQ-V 1H473JZ2	MAT	20-22137-47350	CN315	DF1B-8P-2.5DSA	HIR	20-30079-10800
C724	ECQ-B 1H103JZ4	MAT	20-22136-10350	CN316	DF1B-3P-2.5DSA	HIR	20-30079-10300
C725	ECQ-B 1H472JZ4	MAT	20-22136-47250	CN317	DF1B-12DP-2.5DSA	HIR	20-30079-11200
C726	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	CN318	DF1B-6P-2.5DSA	HIR	20-30079-10600
C727	ECEA 1EU101 B	MAT	20-20123-10725	CN319	DF1B-18DP-2.5DSA	HIR	20-30079-11800
C802	ECQ-B 1H103JZ4	MAT	20-22136-10350	CN320	DF1B-2P-2.5DSA	HIR	20-30079-10200
C803	NP 2D 101J T	TYO	20-22393-10177	CN321	DF1B-2P-2.5DSA	HIR	20-30079-10200
C804	ECEA 2AU0R47 B	MAT	20-20123-47472	CN322	DF1B-2P-2.5DSA	HIR	20-30079-10200
C805	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	CN323	DF1B-30DP 2.5DSA	HIR	20-30079-13000
C806	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	< TEST POLES >			
C807	EEC S5R5H224	MAT	20-29010-22405	* TP101			
C808	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	* TP102			
C809	ECEA 1EU101 B	MAT	20-20123-10725	* TP103			
C901	ECEA 1EU471 B	MAT	20-20123-47725	* TP104			
C902	ECEA 2AU010 B	MAT	20-20123-10572	* TP501			
C903	ECEA 2AU010 B	MAT	20-20123-10572	* TP502			
C904	ECQ-B 1H103JZ4	MAT	20-22136-10350	* TP503			
C905	ECEA 2AU010 B	MAT	20-20123-10572	* TP504			
C906	ECQ-B 1H332JZ4	MAT	20-22136-33250	* TP505			
C907	ECQ-F 6332KZ	MAT	20-22121-33286	* TP601			
C908	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	* TP602			
C909	ECEA 1JU100 B	MAT	20-20123-10663	* TP603			
C910	ECQ-B 1H222JZ4	MAT	20-22136-22250	* TP604			
C911	ECQ-B 1H222JZ4	MAT	20-22136-22250	* TP605			
C912	ECEA 1EU471 B	MAT	20-20123-47725	* TP606			
C913	ECQ-B 1H332JZ4	MAT	20-22136-33250	* TP607			
C914	ECEA 2AU010 B	MAT	20-20123-10572	* TP701			
C915	ECQ-B 1H332JZ4	MAT	20-22136-33250	* TP702			
C916	DHR 1E 225MIS	NEC	20-21092-22525	* TP703			
C917	ECEA 2AU4R7 B	MAT	20-20123-47572	* TP704			
C918	ECQ-B 1H222JZ4	MAT	20-22136-22250	* TP705			
C919	NP 2D 471J T	TYO	20-22393-47177	* TP706			
C920	RT-HE40 TKSL 470K	KCK	20-24518-47050	< PARTS LIST-11 >			
C921	DHR 1V 474K1S	NEC	20-21092-47435	L201	ST-901285A	IKE	20-40985-12851
C922	DHR 1V 334K1S	NEC	20-21092-33435	L202	LF5.0ST26 100K	KOA	20-40332-10000
C926	ECEA 1EU101 B	MAT	20-20123-10725	L203	LF5.0ST26 330K	KOA	20-40332-33000
C927	ECEA 1EU101 B	MAT	20-20123-10725	L301	ST-901285A	IKE	20-40985-12851
VC201	ECV 1ZW 20X53T	MAT	20-25010-00300	L302	LF5.0ST26 390K	KOA	20-40332-39000
VC301	ECV 1ZW 20X53T	MAT	20-25010-00300	L303	LF5.0ST26 4R7K	KOA	20-40332-04700
VC501	ECV 1ZW 40X53T	MAT	20-25010-00600	L304	LF5.0ST26 560K	KOA	20-40332-56000
< INDUCTANCE COILS >				L305	LF5.0ST26 8R2K	KOA	20-40332-08200
< FILTERS >				L306	P-8R2	SUD	20-40451-08200
< DELAY LINES >				L501	LF5.0ST26 100K	KOA	20-40332-10000
< CRYSTALS >				L502	LF5.0ST26 3R3K	KOA	20-40332-03300
< SWITCHES >				L601	LF5.0ST26 3R9K	KOA	20-40332-03900
< CONNECTORS >				L602	LF5.0ST26 3R9K	KOA	20-40332-03900
< TEST POLES >				L603	LF5.0ST26 3R9K	KOA	20-40332-03900
< PARTS LIST-11 >				L801	LHL08TB 101K	TYC	20-40335-10100

DEF & POWER (COMMON)

94058-15011 PP-904950 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< INTEGRATED CIRCUITS >							
* IC101	MA2830	FJS	20-01373-02830	R109	ERDS2TJ 103 T	MAT	20-12108-10313
	TC-80A	SKK	20-59001-01052	R110	ERG-1 ANJ 330	MAT	20-11005-33033
* IC102	TL431CLPB	TEX	20-01574-00711	R111	ERDS2TJ 221 T	MAT	20-12108-22113
IC103	NJM7812FA	JRC	20-01392-00223	R112	ERG-1 ANJ 330	MAT	20-11005-33033
	OSH-3030-SP	RYO	20-55518-00300	R113	ERDS1VJ 681 T	MAT	20-12106-68123
* IC104	PC111L	SRP	20-09452-00010	* R114	ERDS2TJ 391 T	MAT	20-12108-39113
IC201	μPC4558C	NEC	20-01783-02100	R115	ERDS2TJ 332 T	MAT	20-12108-33213
< TRANSISTORS >							
TR101	2SC2298B	HIT	20-02824-06880	R119	ERDS1VJ 750T	MAT	20-12108-75023
TR201	2SC1815-Y TPE2	TOS	20-02824-05702	R120	ERDS2TJ 104 T	MAT	20-12108-10413
TR204	2SD1407-Y	TOS	20-02825-04055	R121	ERDS2TJ 102 T	MAT	20-12108-10213
TR205	2SC3588K	NEC	20-02824-14601	R122	ERDS2TJ 152 T	MAT	20-12108-15213
* TR206	2SC4123	SYO	20-02824-16020	R123	ERDS1VJ 471 T	MAT	20-12106-47133
TR207	2SC4123	SYO	20-02824-16020	R201	ERDS2TJ 103 T	MAT	20-12108-10313
TR208	2SB649A-C	HIT	20-02823-00501	R202	ERDS2TJ 333 T	MAT	20-12108-33313
TR209	2SJ76	HIT	20-02827-00100	* R203	ERDS2TJ 472 T	MAT	20-12108-47213
TR210	2SD1138D	HIT	20-02825-03301	R204	ERDS2TJ 103 T	MAT	20-12108-10313
TR211	2SB861C	HIT	20-02823-01000	R205	ERDS2TJ 102 T	MAT	20-12108-10213
TR212	2SD1138D	HIT	20-02825-03301	R206	ERDS1VJ 472 T	MAT	20-12106-47223
TR213	2SA1015-Y TPE2	TOS	20-02822-05402	R207	ERDS2TJ 473 T	MAT	20-12108-47313
TR214	2SD1407-Y	TOS	20-02825-04055	R208	ERDS2TJ 333 T	MAT	20-12108-33313
TR215	2SD1407-Y	TOS	20-02825-04055	R209	ERDS2TJ 332 T	MAT	20-12108-33213
TR216	2SD1138D	HIT	20-02825-03301	R210	ERDS2TJ 152 T	MAT	20-12108-15213
< DIODES >							
D101	RBV-406	SKN	20-03516-10460	R211	ERDS2TJ 103 T	MAT	20-12108-10313
D102	RD8.2EB2	NEC	20-03513-02004	R212	ERDS2TJ 222 T	MAT	20-12108-22213
D103	DFH10TG	SYO	20-03093-00200	R213	ERDS2TJ 472 T	MAT	20-12108-47213
D104	DFH10TG	SYO	20-03093-00200	R214	ERDS2TJ 103 T	MAT	20-12108-10313
D105	DFH10TG	SYO	20-03093-00200	R215	ERDS1VJ 152T	MAT	20-12106-15223
D106	FMG-G26S	SKN	20-03157-03090	R216	ERG-2 ANJ 471H	MAT	20-11025-47143
D107	FMG-G26S	SKN	20-03157-03090	R217	ERG-2ANJ 473H	MAT	20-11025-47343
D108	ERB91-02	FJE	20-03122-00300	R218	ERX-2 ANJ 1R0H	MAT	20-11029-01043
D109	RD6.8EB2	NEC	20-03513-01705	R219	ERDS2TJ 391 T	MAT	20-12108-39113
D110	1S1588 TPB2	TOS	20-03812-01201	R220	ERG-2ANJ 331H	MAT	20-11025-33143
D111	V06C	HIT	20-03631-00200	R221	ERG-2ANJ 683H	MAT	20-11025-68343
D112	03P2M	NEC	20-03901-01000	R222	ERG-2ANJ 222T	MAT	20-12106-22223
D113	V06C	HIT	20-03631-00200	* R223	ERDS1VJ 224 T	MAT	20-12106-22423
D201	1S1588 TPB2	TOS	20-03812-01201	R224	ERDS2TJ 330 T	MAT	20-12108-33013
D202	1S1588 TPB2	TOS	20-03812-01201	R225	ERDS2TJ 332 T	MAT	20-12108-33213
D203	1S1588 TPB2	TOS	20-03812-01201	R226	ERG-2 ANJ103H	MAT	20-11025-10343
D204	RD12EB1	NEC	20-03513-02505	R227	ERG-2 ANJ103H	MAT	20-12108-22213
* D205	1S1588 TPB2	TOS	20-03812-01201	R228	ERDS2TJ 104 T	MAT	20-12106-10433
D206	1S1588 TPB2	TOS	20-03812-01201	* R229	ERDS2TJ 155 T	MAT	20-12108-15513
D207	1S1588 TPB2	TOS	20-03812-01201	R230	ERX-2 ANJ 2R2H	MAT	20-11029-02243
D208	1S1588 TPB2	TOS	20-03812-01201	R231	ERDS1VJ 100 T	MAT	20-12106-10033
D209	RD24EB1	NEC	20-03513-03205	R232	ERDS2TJ 103 T	MAT	20-12108-10313
D210	1S1588 TPB2	TOS	20-03812-01201	R233	ERG-2 ANJ 681H	MAT	20-11025-68143
D211	1S1588 TPB2	TOS	20-03812-01201	R234	ERG-1 ANJ 102	MAT	20-11005-10233
D212	DFH10TG	SYO	20-03093-00200	R235	ERG-1 ANJ 102	MAT	20-11005-10233
D213	DFH10TG	SYO	20-03093-00200	R236	ERDS2TJ 222 T	MAT	20-12108-22213
D214	DFC15TR	SYO	20-03093-00300	R237	ERDS1VJ 104 T	MAT	20-12106-10433
D215	DFH10TG	SYO	20-03093-00200	* R238	ERDS2TJ 155 T	MAT	20-12108-15513
D216	DFH10TG	SYO	20-03093-00200	R239	ERX-2 ANJ 2R2H	MAT	20-11029-02243
D217	RU4D	SKN	20-03518-00101	R240	ERDS1VJ 100 T	MAT	20-12106-10033
D218	DFD30TG	SYO	20-03093-00400	R241	ERDS2TJ 103 T	MAT	20-12108-10313
D219	DFH10TG	SYO	20-03093-00200	R242	ERG-2 ANJ 681H	MAT	20-11025-68143
D220	V06C	HIT	20-03631-00200	R243	ERG-1 ANJ 102	MAT	20-11005-10233
D221	V06C	HIT	20-03631-00200	R244	ERG-1 ANJ 102	MAT	20-11005-10233
D222	MA27W-A	MAT	20-03363-00200	R245	ERDS2TJ 391 T	MAT	20-12108-39113
D223	DFH10TG	SYO	20-03093-00200	R246	ERDS2TJ 221 T	MAT	20-12108-22113
D224	1S1588 TPB2	TOS	20-03812-01201	R247	ERDS2TJ 101 T	MAT	20-12108-10113
< RESISTORS >							
R101	ERDS1VJ 224 T	MAT	20-12106-22423	* VR101	RG-06VT2 1KΩ	COS	20-15550-10200
R102	ERDS1VJ 224 T	MAT	20-12106-22423	* VR201	RG-06VT2 10KΩ	COS	20-15550-10300
R103	ERDS1VJ 224 T	MAT	20-12106-22423	VR202	RG-06UT2 10KΩ	COS	20-15549-10300
R104	ERDS2TJ 104 T	MAT	20-12108-10413	VR203	RG-06UT2 20KΩ	COS	20-15549-20300
R105	ERG-2 ANJ 104H	MAT	20-11025-10443	VR204	RG-06UT2 100KΩ	COS	20-15549-10400
R106	ERG-2 ANJ 104H	MAT	20-11025-10443	VR205	RG-06UT2 5KΩ	COS	20-15549-50200
R107	ERDS2TJ 332 T	MAT	20-12108-33213	VR206	RG-06UT2 50Ω	COS	20-15194-50000
R108	ERDS2TJ 101 T	MAT	20-12108-10113	* VR208	GF-06UT2 2MΩ	COS	20-15194-20500
				VR209	RG-06UT2 50KΩ	COS	20-15549-50300

PARTS LIST-12

DEF & POWER (COMMON)

94058-15011 PP-904950 02 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE		
TH101	PTH451A102BF140M270	MUR	20-19012-00203	< TRANSFORMERS >					
TH103	5D-11	ISI	20-19026-00040	* T101	ST-902466A	IKE	20-40985-24660		
< CAPACITORS >									
C101	XE 224-Z	OKA	20-22692-22478	T201	ETH-19Y22AY	MAT	20-40130-01000		
C102	XE 224-Z	OKA	20-22692-22478	* T202	ST-901265A	IKE	20-40985-12651		
C103	ECK-D NS 222MEX	MAT	20-24122-22200	< RELAYS >					
C104	ECK-D NS 222MEX	MAT	20-24122-22200	RL101	AJW3211	MAT	20-46007-03320		
C105	ECOS 2DG471H	MAT	20-20142-47779	< CONNECTORS >					
C106	ECOS 2DG471H	MAT	20-20142-47779	CN101	IG-0342-S	DIT	20-56002-02600		
C107	DTW 333J 630V	SIN	20-22100-33387	CN102	00-9090-03-0116-805	ELC	20-30508-10031		
C108	ECEA 2CU010 B	MAT	20-20123-10575	CN103	00-9090-03-0116-805	ELC	20-30508-10031		
*	C109	ECQ-B 1H103JZ4	MAT	20-22136-10350	CN104	00-9090-02-0116-805	ELC	20-30508-10021	
C110	ECEA 1JU100 B	MAT	20-20123-10663	CN105	TS-80P-02-V1	TAD	20-30423-00250		
C111	ECQ-B 1H103JZ4	MAT	20-22136-10350		005T-1100	TAD	20-30423-00010		
C112	ECQ-B 1H103JZ4	MAT	20-22136-10350		TS-80H-02-A1	TAD	20-30423-00360		
C113	ECQ-B 1H103JZ4	MAT	20-22136-10350	CN106	TS-80P-02-V1	TAD	20-30423-00250		
C114	ECEA 2AU101	MAT	20-20125-10772	CN201	DF1B-18DP-2.5DSA	HIR	20-30079-11800		
C115	ECEA 2EU3R3	MAT	20-20125-33578	CN202	00-9090-04-0116-805	ELC	20-30508-10042		
C116	ECOS 2CG471L	MAT	20-20142-47763	CN203	DF1B-5P-2.5DSA	HIR	20-30079-10500		
C118	ECEA 1JU102	MAT	20-20125-10863	CN204	DF1B-3P-2.5DSA	HIR	20-30079-10300		
C119	ECEA 1EU102	MAT	20-20125-10825	CN206	1951R	NMO	20-30561-00200		
C120	RT-DSKC85TK YF 104Z	KCK	20-24518-10425		1381-TL	NMO	20-30562-00200		
C121	ECQ-B 2473KF	MAT	20-22129-47378	CN705	TS-80H-01-A1	TAD	20-30423-00350		
C122	ECEA 1EU470 B	MAT	20-20123-47625		005T-1100	TAD	20-30423-00010		
C123	ECEA 1EU470 B	MAT	20-20123-47625	< TEST POLES >					
C124	ECEA 1EU101 B	MAT	20-20123-10725	* TP101					
C201	ECEA 2AU010 B	MAT	20-20123-10572	* TP102					
C202	ECEA 1EN100S B	MAT	20-20129-10625	* TP103					
C203	RT-DSKC85TK YF 104Z	KCK	20-24518-10425	* TP104					
C204	ECEA 1EN100S B	MAT	20-20129-10625	* TP105					
C205	ECQ-B 1H333JZ4	MAT	20-22136-33350	* TP201					
C206	ECEA 2CU010 B	MAT	20-20123-10575	* TP202					
C207	ECEA 1HU470	MAT	20-20125-47650	* TP203					
C208	ECEA 1JU100 B	MAT	20-20123-10663	< FUSES >					
C209	ECEA 1JU100 B	MAT	20-20123-10663	F101	FAU031-3573	SCH	20-53506-00100		
C210	ECQ-B 1H102JZ4	MAT	20-22136-10250	< DEF & POWER (JPN, USA) >					
C211	ECEA 1JFS100 B	MAT	20-20130-10663	94058-15012	PP-904964	01	9308		
C212	ECQ-B 2473KF	MAT	20-22129-47378	< DEF & POWER (EUR) >					
C215	ECEA 2CU470W	MAT	20-20125-47676	< DEF & POWER (COMMON) >					
C216	ECQ-F 6222KZ	MAT	20-22121-22286	< DEF & POWER (JPN, USA) >					
C217	ECEA 2CU010 B	MAT	20-20123-10575	< DEF & POWER (EUR) >					
*	C218	< OTHERS >							
C219	DHS 105J/200V	SIN	20-22097-10577	< DEF & POWER (COMMON) >					
C220	ECQ-B 2104KF	MAT	20-22129-10478	< DEF & POWER (JPN, USA) >					
C221	HS11SJ YB 102K	KCK	20-24212-10291	< DEF & POWER (EUR) >					
★ C222	DKR 102J 1600V D00	SIN	20-22104-10290	< DEF & POWER (COMMON) >					
★ C223	ECQ-V 1H473JZ2	MAT	20-22137-47350	< DEF & POWER (JPN, USA) >					
★ C224	DKR 222J 1600V D00	SIN	20-22104-22290	< DEF & POWER (EUR) >					
★ C225	DKR 332J 1600V D00	SIN	20-22104-33290	< DEF & POWER (COMMON) >					
★ C226	DKR 222J 1600V D00	SIN	20-22104-22290	< DEF & POWER (JPN, USA) >					
C227	ECEA 2CU470W	MAT	20-20125-47676	< DEF & POWER (EUR) >					
C228	ECEA 2AU010 B	MAT	20-20123-10572	< DEF & POWER (COMMON) >					
★ C229	DKR 102J 1600V D00	SIN	20-22104-10290	< DEF & POWER (JPN, USA) >					
★ C230	DKR 102J 1600V D00	SIN	20-22104-10290	< DEF & POWER (EUR) >					
C231	DTW 473J 200V	SIN	20-22100-47377	< DEF & POWER (COMMON) >					
C232	DTW 472J 630V	SIN	20-22100-47287	< DEF & POWER (JPN, USA) >					
C233	ECEA 1JU100 B	MAT	20-20123-10663	< DEF & POWER (EUR) >					
C234	ECEA 1JU100 B	MAT	20-20123-10663	< DEF & POWER (COMMON) >					
C235	ECEA 1JU100 B	MAT	20-20123-10663	< DEF & POWER (JPN, USA) >					
C236	ECEA 1JU221	MAT	20-20125-22763	< DEF & POWER (EUR) >					
C238	ECEA 1JU102	MAT	20-20125-10863	< DEF & POWER (COMMON) >					
< INDUCTANCE COILS >									
L101	ELF-18D290V	MAT	20-43122-02900	< DEF & POWER (JPN, USA) >					
L102	LHL08TB 101K	TYC	20-40335-10100	< DEF & POWER (EUR) >					
L103	LHL08TB 101K	TYC	20-40335-10100	< DEF & POWER (COMMON) >					
L104	TSL1110-101K1R0	TDK	20-40586-00304	< DEF & POWER (JPN, USA) >					
L201	LHL08TB 332J	TYC	20-40335-33200	< DEF & POWER (EUR) >					
L202	LHL08TB 332J	TYC	20-40335-33200	< DEF & POWER (COMMON) >					
★ L203	ST-902374A	IKE	20-40985-23741	< DEF & POWER (JPN, USA) >					
L204	HL11D 223K	HRN	20-40212-00200	< DEF & POWER (EUR) >					

14" FRONT RIGHT BOARD

94058-15100 PP-904954 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE																
< INTEGRATED CIRCUITS >																							
IC 1	NJU3715L	JRC	20-01395-03710	S 10	SKHHAK	ALP	20-34267-01009																
< DIODES >																							
D 8	TLG226	TOS	20-03572-00330	S 11	SKHHAK	ALP	20-34267-01009																
D 9	TLG226	TOS	20-03572-00330	S 12	SKHHAK	ALP	20-34267-01009																
D 10	TLG226	TOS	20-03572-00330	S 13	SKHHAK	ALP	20-34267-01009																
D 11	TLG226	TOS	20-03572-00330	< SWITCHES >		< CONNECTORS >																	
D 12	TLG226	TOS	20-03572-00330	CN501	DF1B-30DP 2.5DSA	HIR	20-30079-13000																
D 13	TLG226	TOS	20-03572-00330	CN502	A3B-8PA-2DS	HIR	20-30003-00300																
D 14	TLG226	TOS	20-03572-00330	CN503	A3B-8PA-2DS	HIR	20-30003-00300																
D 15	TLG226	TOS	20-03572-00330	VR BOARD																			
D 16	TLG226	TOS	20-03572-00330	94058-15030 PP-904958 01 9308																			
D 17	TLG226	TOS	20-03572-00330	NO. DESCRIPTION MFD. PARTS-CODE																			
D 18	TLG226	TOS	20-03572-00330	< RESISTORS >																			
D 19	TLG226	TOS	20-03572-00330	VR 1	S 902361	ALP	20-15995-23610																
D 20	TLG226	TOS	20-03572-00330	VR 2	S 902361	ALP	20-15995-23610																
D 21	TLG226	TOS	20-03572-00330	VR 3	ST-902361	ALP	20-15995-23610																
D 22	TLY226	TOS	20-03576-01000	V	ST-902361	ALP	20-15995-23610																
D 23	TLY226	TOS	20-03576-01000	R 3 ERDS2TJ 751 T MAT 20-12108-75113																			
D 24	TLY226	TOS	20-03576-01000	R 4 ERDS2TJ 751 T MAT 20-12108-75113																			
D 25	TLY226	TOS	20-03576-01000	R 5 ERDS2TJ 751 T MAT 20-12108-75113																			
* D 27				R 6 ERDS2TJ 751 T MAT 20-12108-75113																			
* D 28				R 7 ERDS2TJ 751 T MAT 20-12108-75113																			
< RESISTORS >								R 8 ERDS2TJ 751 T MAT 20-12108-75113															
< CAPACITORS >								R 9 ERDS2TJ 751 T MAT 20-12108-75113															
C 2	ECEA 1CKA101 B	MAT	20-20128-10716	R 10 ERDS2TJ 751 T MAT 20-12108-75113								R 11 ERDS2TJ 751 T MAT 20-12108-75113											
C 3	ECEA 1CKA101 B	MAT	20-20128-10716	R 12 ERDS2TJ 751 T MAT 20-12108-75113								R 13 ERDS2TJ 751 T MAT 20-12108-75113											
< SWITCHES >								R 14 ERDS2TJ 751 T MAT 20-12108-75113								R 15 ERDS2TJ 152 T MAT 20-12108-15213							
S 1 SKHHAK ALP 20-34267-01009								R 16 ERDS2TJ 751 T MAT 20-12108-75113								R 17 ERDS2TJ 472 T MAT 20-12108-47213							
S 2 SKHHAK ALP 20-34267-01009								R 18 ERDS2TJ 472 T MAT 20-12108-47213								R 19 ERDS2TJ 472 T MAT 20-12108-47213							
S 3 SKHHAK ALP 20-34267-01009								R 20 ERDS2TJ 472 T MAT 20-12108-47213								R 21 ERDS2TJ 103 T MAT 20-12108-10313							
S 4 SKHHAK ALP 20-34267-01009								VR 1 RG-06UT2 10KΩ COS 20-15549-10300								VR 2 GV-6U 10KΩ COS 20-15199-10320							
S 5 SKHHAK ALP 20-34267-01009								VR 3 GV-6U 10KΩ COS 20-15199-10320								VR 4 GV-6U 10KΩ COS 20-15199-10320							
S 6 SKHHAK ALP 20-34267-01009								VR 5 GV-6U 10KΩ COS 20-15199-10320								VR 6 GV-6U 10KΩ COS 20-15199-10320							
S 7 SKHHAK ALP 20-34267-01009								VR 7 RG-06UT2 10KΩ COS 20-15549-10300								VR 8 RG-06UT2 10KΩ COS 20-15549-10300							
S 8 SKHHAK ALP 20-34267-01009								VR 9 RG-06UT2 10KΩ COS 20-15549-10300								VR 10 RG-06UT2 10KΩ COS 20-15549-10300							
S 9 SKHHAK ALP 20-34267-01009								VR 11 RG-06UT2 10KΩ COS 20-15549-10300								PARTS LIST-14							

14" FRONT LEFT BOARD

94058-15110 PP-904955 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< DIODES >							
D 1	SLP-274B	SYO	20-03553-02740				
D 2	SLP-960C	SYO	20-03553-00900				
D 3	SLP-960C	SYO	20-03553-00900				
< SWITCHES >							
S 1	SKHHAK	ALP	20-34267-01009				
< CONNECTORS >							
CN601	DF1B-5P-2.5DSA	HIR	20-30079-10500				

14" CRT SOCKET BOARD

94058-15130 PP-904952 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< RESISTORS >							
R 1	ERDS2TJ 101 T	MAT	20-12108-10113				
R 2	ERDS2TJ 101 T	MAT	20-12108-10113				
R 3	ERDS2TJ 101 T	MAT	20-12108-10113				
R 4	ERDS2TJ 100 T	MAT	20-12108-10013				
< CAPACITORS >							
C 1	HS23SJ YE 103P	KCK	20-24212-10391				
< CONNECTORS >							
CN207	1951P 1380-TL	NMO	20-30561-00100 20-30562-00100				
CN701	DF1B-2P-2.5DSA	HIR	20-30079-10200				
CN702	DF1B-2P-2.5DSA	HIR	20-30079-10200				
CN703	DF1B-2P-2.5DSA	HIR	20-30079-10200				
CN704	DF1B-3P-2.5DSA	HIR	20-30079-10300				
CN705	SZ-0010-29	SMK	20-51851-00100				
CN706	XB-0865	SMK	20-54307-00100				
< TEST POLES >							
* TP 1							
* TP 2							
* TP 3							
* TP 4							
TB 1	62409-1	AMP	20-30801-02400				
< OTHERS >							
SK 1	GD-626	NHK	20-59003-01005				
SK 2	GD-626	NHK	20-59003-01005				
SK 3	GD-626	NHK	20-59003-01005				

14" CRT

94058-15140 PP-905047 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< TUBES >							
* V 1	M34JLR11X09	HIT	20-72110-03200				

20" FRONT PANEL

94058-15090 PP-904956 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE												
< INTEGRATED CIRCUITS >																			
IC 1	NJU3715L	JRC	20-01395-03710	S 8	SKHHAK	ALP	20-34267-01009												
< DIODES >																			
D 8	TLG226	TOS	20-03572-00330	S 9	SKHHAK	ALP	20-34267-01009												
D 9	TLG226	TOS	20-03572-00330	S 10	SKHHAK	ALP	20-34267-01009												
D 10	TLG226	TOS	20-03572-00330	S 11	SKHHAK	ALP	20-34267-01009												
D 11	TLG226	TOS	20-03572-00330	S 12	SKHHAK	ALP	20-34267-01009												
D 12	TLG226	TOS	20-03572-00330	S 13	SKHHAK	ALP	20-34267-01009												
D 13	TLG226	TOS	20-03572-00330	S 16	SKHHAK	ALP	20-34267-01009												
D 14	TLG226	TOS	20-03572-00330	< CONNECTORS >															
D 15	TLG226	TOS	20-03572-00330	CN501	DF1B-30DP 2.5DSA	HIR	20-30079-13000												
D 16	TLG226	TOS	20-03572-00330	CN502	A3B-8PA-2DS	HIR	20-30003-00300												
D 17	TLG226	TOS	20-03572-00330	CN503	A3B-8PA-2DS	HIR	20-30003-00300												
D 18	TLG226	TOS	20-03572-00330	VR BOARD															
D 19	TLG226	TOS	20-03572-00330	94058-15030 PP-904958 01 9308															
D 20	TLG226	TOS	20-03572-00330	NO. DESCRIPTION MFD. PARTS-CODE															
D 21	TLG226	TOS	20-03572-00330	< RESISTORS >															
D 22	TLY226	TOS	20-03576-01000	VR 1	ST-902361	ALP	20-15995-23610												
D 23	TLY226	TOS	20-03576-01000	VR 2	ST-902361	ALP	20-15995-23610												
D 24	TLY226	TOS	20-03576-01000	VR 3	ST-902361	ALP	20-15995-23610												
D 25	TLY226	TOS	20-03576-01000	VR 4	ST-902361	ALP	20-15995-23610												
D 26	SLP-274B	SYO	20-03553-02740	*															
* D 27	< RESISTORS >								*										
* D 28	< CAPACITORS >								*										
R 3	ERDS2TJ 751 T	MAT	20-12108-75113	C 2 ECEA 1CKA101 B MAT 20-20128-10716															
R 4	ERDS2TJ 751 T	MAT	20-12108-75113	C 3 ECEA 1CKA101 B MAT 20-20128-10716															
R 5	ERDS2TJ 751 T	MAT	20-12108-75113	< SWITCHES >															
R 6	ERDS2TJ 751 T	MAT	20-12108-75113	S 1 SKHHAK ALP 20-34267-01009	S 2 SKHHAK ALP 20-34267-01009						PARTS LIST-16								
R 7	ERDS2TJ 751 T	MAT	20-12108-75113	S 3 SKHHAK ALP 20-34267-01009	S 4 SKHHAK ALP 20-34267-01009														
R 8	ERDS2TJ 751 T	MAT	20-12108-75113	S 5 SKHHAK ALP 20-34267-01009	S 6 SKHHAK ALP 20-34267-01009														
R 9	ERDS2TJ 751 T	MAT	20-12108-75113	S 7 SKHHAK ALP 20-34267-01009															
R 10	ERDS2TJ 751 T	MAT	20-12108-75113	- 29 -															
R 11	ERDS2TJ 751 T	MAT	20-12108-75113																
R 12	ERDS2TJ 751 T	MAT	20-12108-75113																
R 13	ERDS2TJ 751 T	MAT	20-12108-75113																
R 14	ERDS2TJ 751 T	MAT	20-12108-75113																
R 15	ERDS2TJ 152 T	MAT	20-12108-15213																
R 16	ERDS2TJ 751 T	MAT	20-12108-75113																
R 17	ERDS2TJ 751 T	MAT	20-12108-75113																
R 18	ERDS2TJ 472 T	MAT	20-12108-47213																
R 19	ERDS2TJ 472 T	MAT	20-12108-47213																
R 20	ERDS2TJ 472 T	MAT	20-12108-47213																
* R 21																			
* R 22																			
R 29	ERDS2TJ 103 T	MAT	20-12108-10313																
VR 1	RG-06UT2 10KΩ	COS	20-15549-10300																
VR 2	GV-6U 10KΩ	COS	20-15199-10320																
VR 3	GV-6U 10KΩ	COS	20-15199-10320																
VR 4	GV-6U 10KΩ	COS	20-15199-10320																
VR 5	GV-6U 10KΩ	COS	20-15199-10320																
VR 6	GV-6U 10KΩ	COS	20-15199-10320																
VR 7	RG-06UT2 10KΩ	COS	20-15549-10300																
VR 8	RG-06UT2 10KΩ	COS	20-15549-10300																
VR 9	RG-06UT2 10KΩ	COS	20-15549-10300																
VR 10	RG-06UT2 10KΩ	COS	20-15549-10300																
VR 11	RG-06UT2 10KΩ	COS	20-15549-10300																

20" LED BOARD

94058-15050 PP-904957 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< DIODES >							
D 1	GL1HD111	SRP	20-03181-00803				
D 2	GL1HD111	SRP	20-03181-00803				
< OTHERS >							
CA909	ST-902496A	HIR	20-66995-24960				

20" CRT SOCKET BOARD

94058-15080 PP-904953 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< RESISTORS >							
R 1	ERDS2TJ 101 T	MAT	20-12108-10113				
R 2	ERDS2TJ 101 T	MAT	20-12108-10113				
R 3	ERDS2TJ 101 T	MAT	20-12108-10113				
R 4	ERDS2TJ 100 T	MAT	20-12108-10013				
< CAPACITORS >							
C 1	HS23SJ YE 103P	KCK	20-24212-10391				
< CONNECTORS >							
CN207	1951P 1380-TL	NMO	20-30561-00100 20-30562-00100				
CN701	DF1B-2P-2.5DSA	HIR	20-30079-10200				
CN702	DF1B-2P-2.5DSA	HIR	20-30079-10200				
CN703	DF1B-2P-2.5DSA	HIR	20-30079-10200				
CN704	DF1B-3P-2.5DSA	HIR	20-30079-10300				
CN705	SZ-0010-29	SMK	20-51851-00100				
CN706	TJS35030/TMM15202	MAT	20-54309-00100				
< TEST POLES >							
* TP 1							
* TP 2							
* TP 3							
* TP 4							
TB 1	62409-1	AMP	20-30801-02400				
< OTHERS >							
SK 1	GD-626	NHK	20-59003-01005				
SK 2	GD-626	NHK	20-59003-01005				
SK 3	GD-626	NHK	20-59003-01005				

20" CRT

94058-15150 PP-905048 01 9308

NO.	DESCRIPTION	MFD.	PARTS-CODE	NO.	DESCRIPTION	MFD.	PARTS-CODE
< TUBES >							
★ V 1	M48JFB05X01	MAT	20-72110-02220				

5. MECHANICAL PARTS LIST AND EXPLODED VIEW

NO.	Japanese	Code	English	JIS NO.
1	なべ小ねじ	NM	PAN HEAD SCREW	B 1111
2	さら小ねじ	SM	FLAT HEAD SCREW, OR FLASH HEAD SCREW	B 1111
3	丸さら小ねじ	MM	OVAL COUNTERSUNK HEAD SCREW	B 1111
4	トラスねじ	TM	TRUSS HEAD SCREW, OR MUSHROOM HEAD SCREW	B 1111
5	バインド小ねじ	NMB	BINDING HEAD SCREW	B 1111
6	平小ねじ	FM	FLAT FILLSTER HEAD SCREW	B 1111
7	丸平小ねじ	CM	OVAL HEAD SCREW	B 1111
8	セムスねじ	NMS	PAN HEAD SCREW WITH SPRING LOCK WASHER	B 1188
9	トラスタッピングねじ	TT	TRUSS HEAD TAPPING SCREWS	B 1122
10	丸さらタッピングねじ	MT	OVAL COUNTERSUNK HEAD TAPPING SCREWS	B 1122
11	さらタッピングねじ	ST	FLAT HEAD TAPPING SCREWS	B 1122
12	バインドタッピングねじ	BNT	BINDING HEAD TAPPING SCREWS	B 1122
13	ホロセット	HM	HEXAGON SOCKET SET SCREW	B 1177
14	ソケットヘッドキャップスクリュー	SHM	HEXAGON SOCKET HEAD CAP SCREW	B 1176
15	なべタッピングねじ	NT	PAN HEAD TAPPING SCREWS	B 1122
16	ヘリサート	MB-1D	HELI SERT	
17	六角ボルト	BM	HEXAGON HEAD BOLTS	B 1180
18	ちょうボルト	WB	WING BOLTS	B 1184
19	六角ナット	N	HEXAGON NUTS	B 1181
20	ちょうナット	WN	WING NUTS	B 1185
21	六角袋ナット	DN	DOMED CAP NUTS	B 1183
22	ばね座金	SW	SPRING LOCK WASHERS	B 1251
23	平座金	HW	PLANE WASHER	B 1256
24	菊ワッシャー	TW	TOOTHED LOCK WASHER	B 1255
25	割りピン	SPP	SPLIT PINS	B 1351
26	テーパーピン	TAP	TAPER PINS	B 1352
27	平行ピン	PAP	PARALLEL PINS	B 1354
28	スプリングピン	SRP	SPRING PINS	B 2808

Notes : Plane washers are divided into the following two types.

HWS: Washers with neck

HWL: Ordinary washers

1	NM BNM		PAN HEAD SCREW PAN HEAD SCREW (BLACK)
2	SM BSM		FLAT HEAD SCREW FLAT HEAD SCREW (BLACK)
3	MM BMM		OVAL COUNTERSUNK HEAD SCREW OVAL COUNTERSUNK HEAD SCREW (BLACK)
4	TM BTM		TRUSS HEAD SCREW TRUSS HEAD SCREW (BLACK)
5	NMB		BINDING HEAD SCREW
8	NMS		PAN HEAD SCREW WITH SPRING LOCK WASHER
9	TT		TRUSS HEAD TAPPING SCREW
10	BNT		BINDING HEAD TAPPING SCREWS
11	MT		OVAL COUNTERSUNK HEAD TAPPING SCREWS
12	ST		FLAT HEAD TAPPING SCREWS
13	HM		HEXAGON SOCKET SET SCREW
14	SHM		HEXAGON SOCKET HEAD CAP SCREW
15	NT		PAN HEAD TAPPING SCREWS

BODY 1 (STANDARD)

PM-950209 94058-20090

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1001	3-F	SCUTCHEON	M0-950139A	1
1002	6-E	CHASSIS	M1-950943	1
1003	7-A	REAR COVER	M1-950954	1
1004	5-C	LEFT BRACKET	M2-950939	1
1005	6-C	RIGHT BRACKET	M2-950940	1
1006	4-D	POWER BUTTON	M3-917616	1
1007	4-D	SW ADAPTER	M3-950206	1
1008	6-D	PCB HOLDER	M3-908268	2
1009	5-D	BUSHING BTYPE	M3-916296	1
1010	6-E	MONITOR FOOT	M4-908267	4
1011	4-D	EARTH SPRING	M4-279433A	2
1012	7-A	BLANK PANEL (2)	M4-950686	1
1013	1-D	NAMB PLATE	D45	1
1014	2-D	SCUTCHEON PACKING	KG-CR5754 (1.2m)	1
1015	8-A	PUSH RIVET	P2632	4
1016	3-C	PURSE LOCK	NQ 62	4
1017	3-E	CRT WASHER	A5052P-H34-t1.0	4
1018	3-E	CRT WASHER	A5052P-H34-t2.0	4
1019	2-D	SCREW	NMB3-10	1
1020	3-D	SCREW	NMB3-10	1
1021	7-A	SCREW	NMB3-6	1
1022	8-B	SCREW	NMB3-6	3
1023	8-C	SCREW	NMB3-6	3
1024	7-C	SCREW	BNT3-10	3
1025	6-C	SCREW	NMB3-6	1
1026	5-D	SCREW	NMB3-6	1
1027	6-D	SCREW	NMB4-6	1
1028	6-D	WASHER	HW4	1
1029	6-D	WASHER	TW4	1
1030	6-E	SCREW	NMB3-6	1
1031	6-E	SCREW	NM2.6-10	2
1032	4-E	SCREW	NMB3-6	1
1033	4-E	SCREW	NMB4-8	2
1034	3-D	SCREW	NM6-16	4
1035	3-E	WASHER	SW6	4
1036	3-E	WASHER	HW6	4
1037	4-D	SCREW	NMB3-6	2
1038	6-F	SCREW	NMB4-16	4
1039	6-F	SCREW	NMB3-6	1
1040	5-F	SCREW	NMB4-8	2

BODY (COVER)

PM-950211 94058-20100

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1101	5-A	TOP COVER	M2-951078	1
1102	8-E	SIDE COVER	M2-951079	A:1
1103	1-A	SIDE COVER	M2-951079	B:1
1104	4-A	SCREW	NMB4-6	4
1105	7-E	SCREW	NMB4-6	5
1106	1-B	SCREW	NMB4-6	5

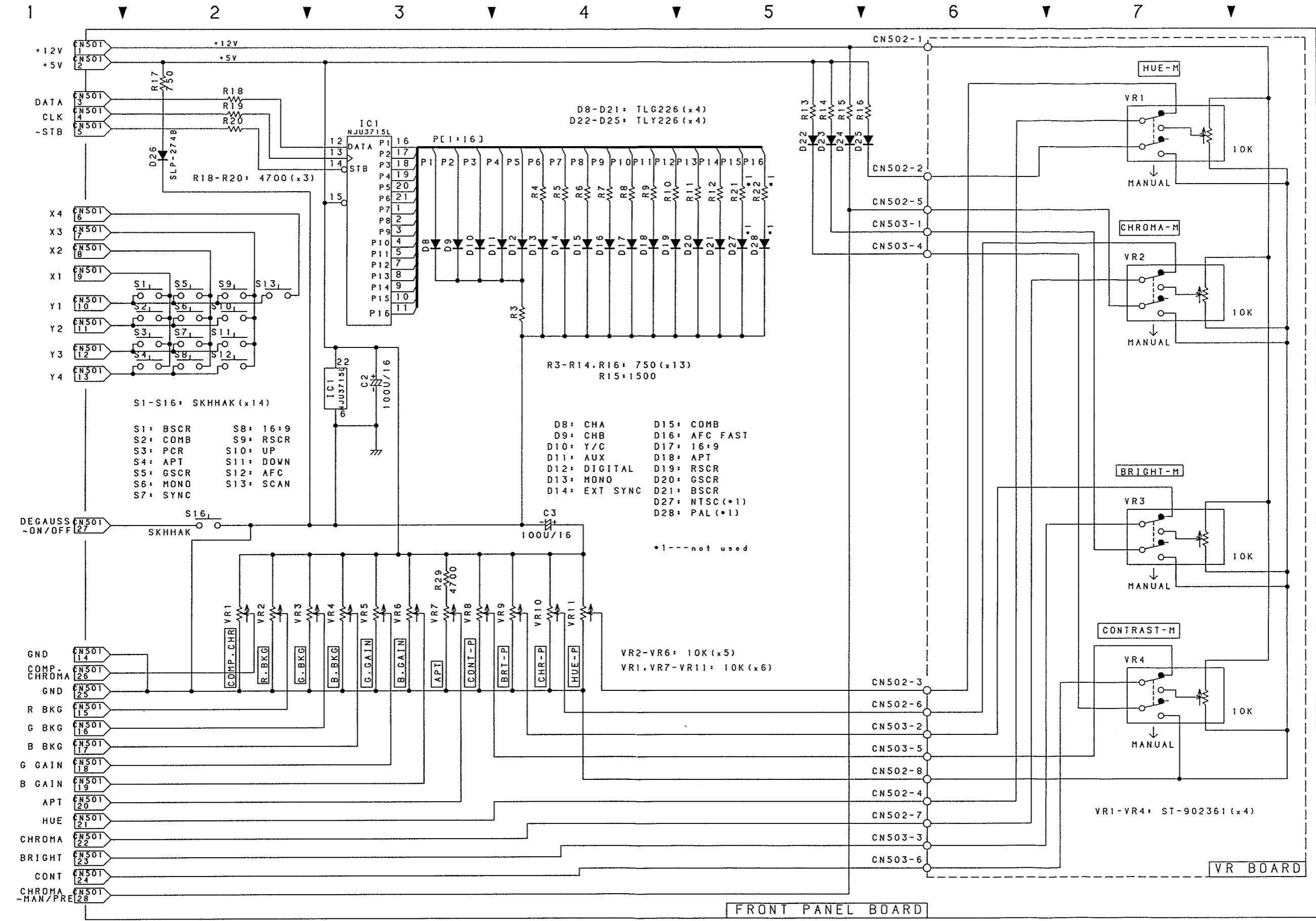
DEF & POWER BOARD PARTS

PM-950222 94058-20190

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1201	5-C	INLET METAL	M2-950941	1
1202	4-C	D&P HEAT SINK	M3-951107	1
1203	4-B	HEAT SINK B	M4-910327	2
1204	4-C	TR HOLDER	M4-920627	1
1205	4-C	SCREW	NMB3-6	2
1206	4-C	SCREW	NMB3-12	1
1207	4-B	SCREW	MM3-8	2
1208	4-A	SCREW	NMB3-6	3
1209	3-A	SCREW	NMB4-6	2
1210	3-B	SCREW	NMB3-6	1
1211	3-B	SCREW	NMB3-6	3
1212	3-B	SCREW	NMB3-6	3

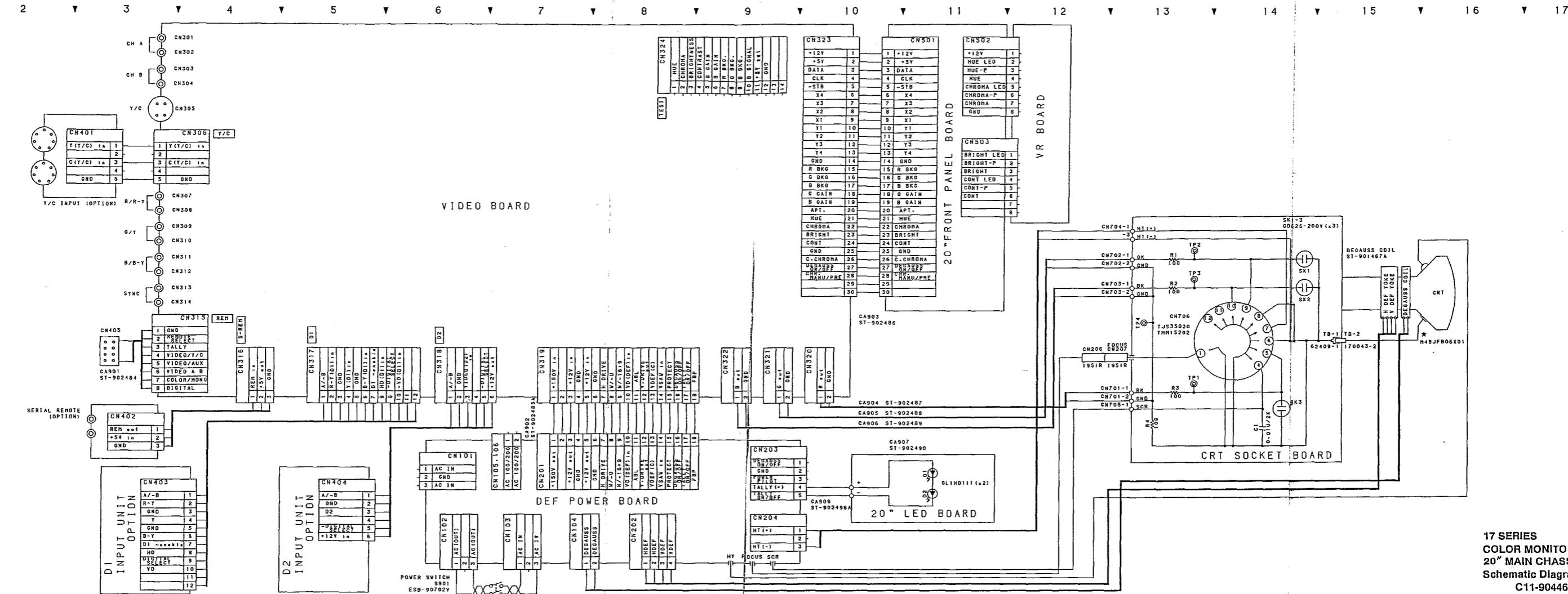
17 SERIES
TM14-17R
COLOR MONITOR
BODY(1/2)
K3-950162(1/2)

IKEGAMI TSUSHINKI CO. LTD



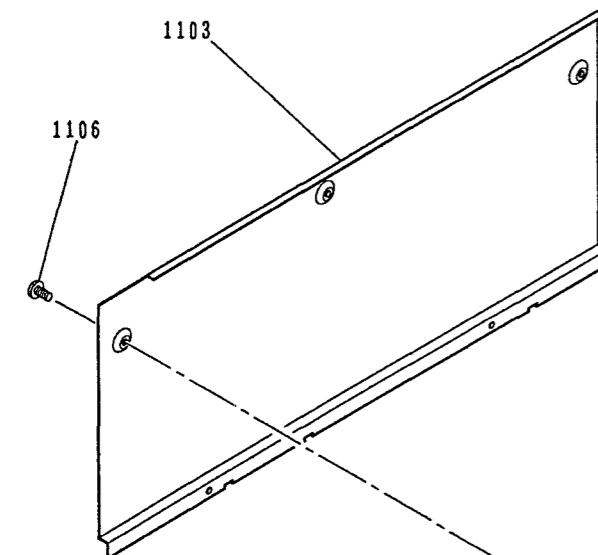
17 SERIES COLOR MONITOR
20" FRONT PANEL/VR BOARD
Schematic Diagram

C3-904463A

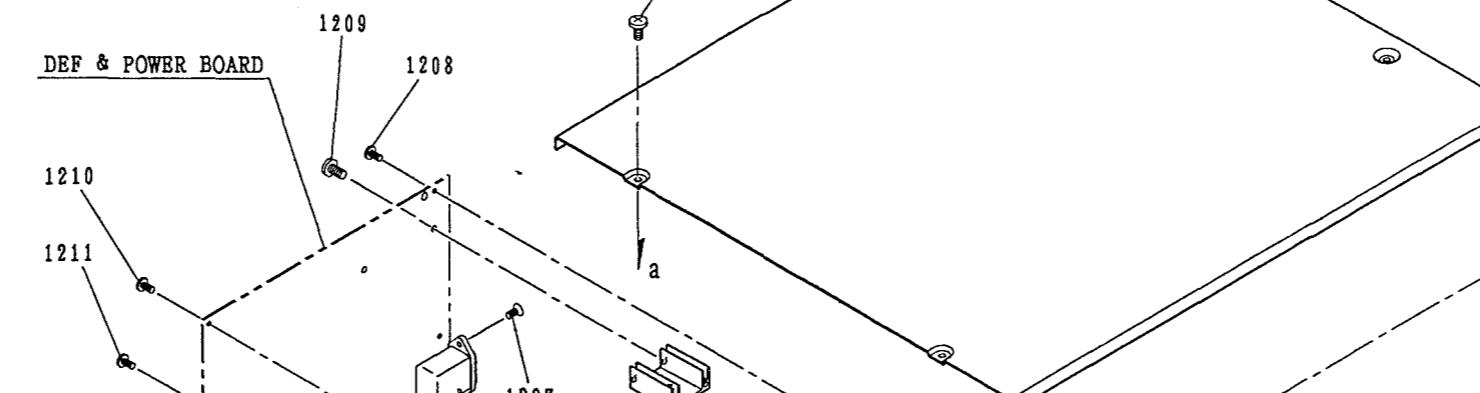


1 2 3 4 5 6 7 8

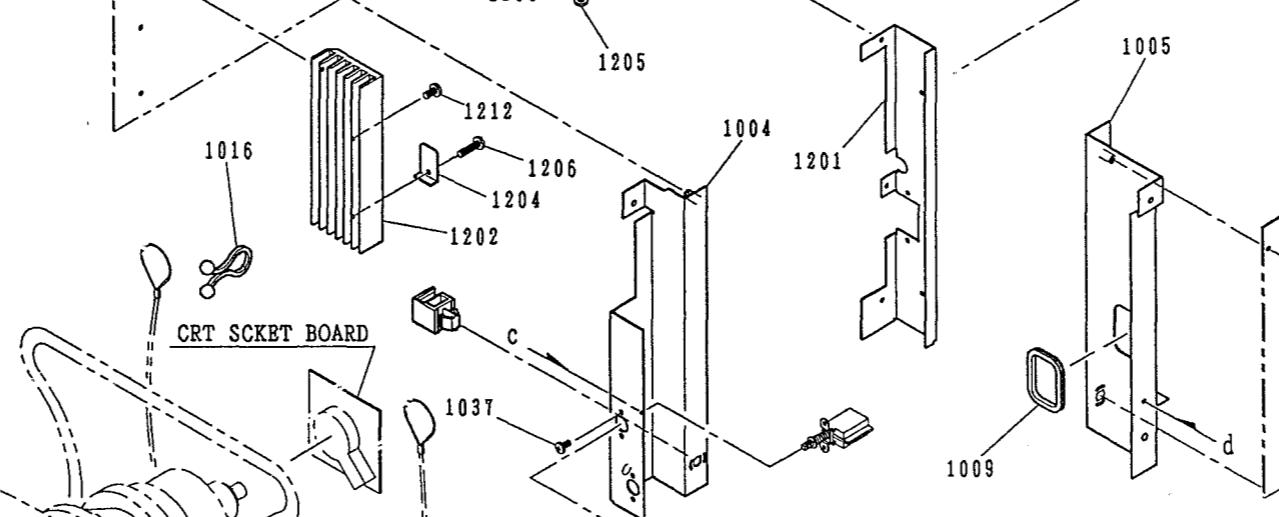
A



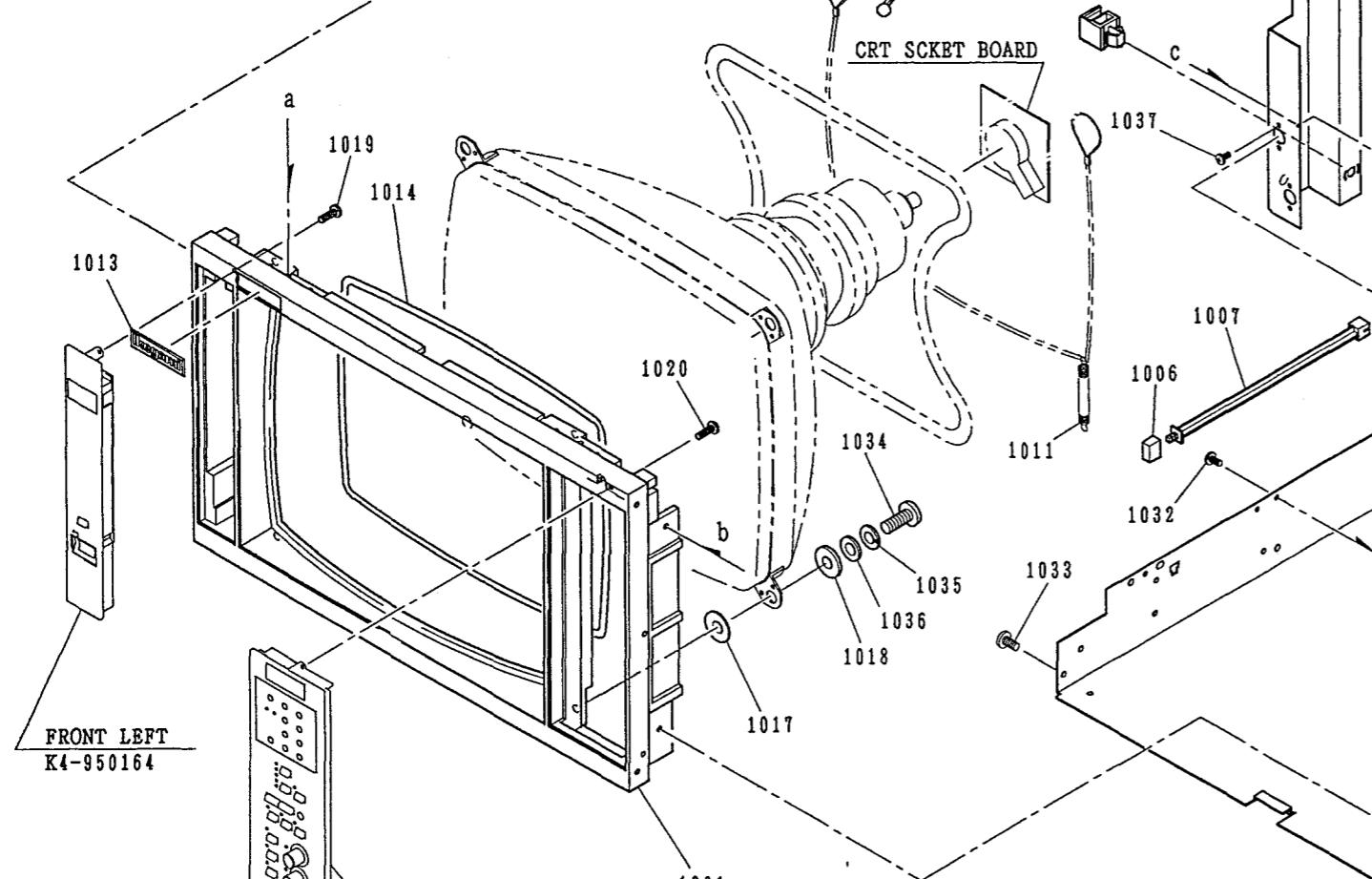
B



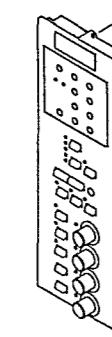
C



D

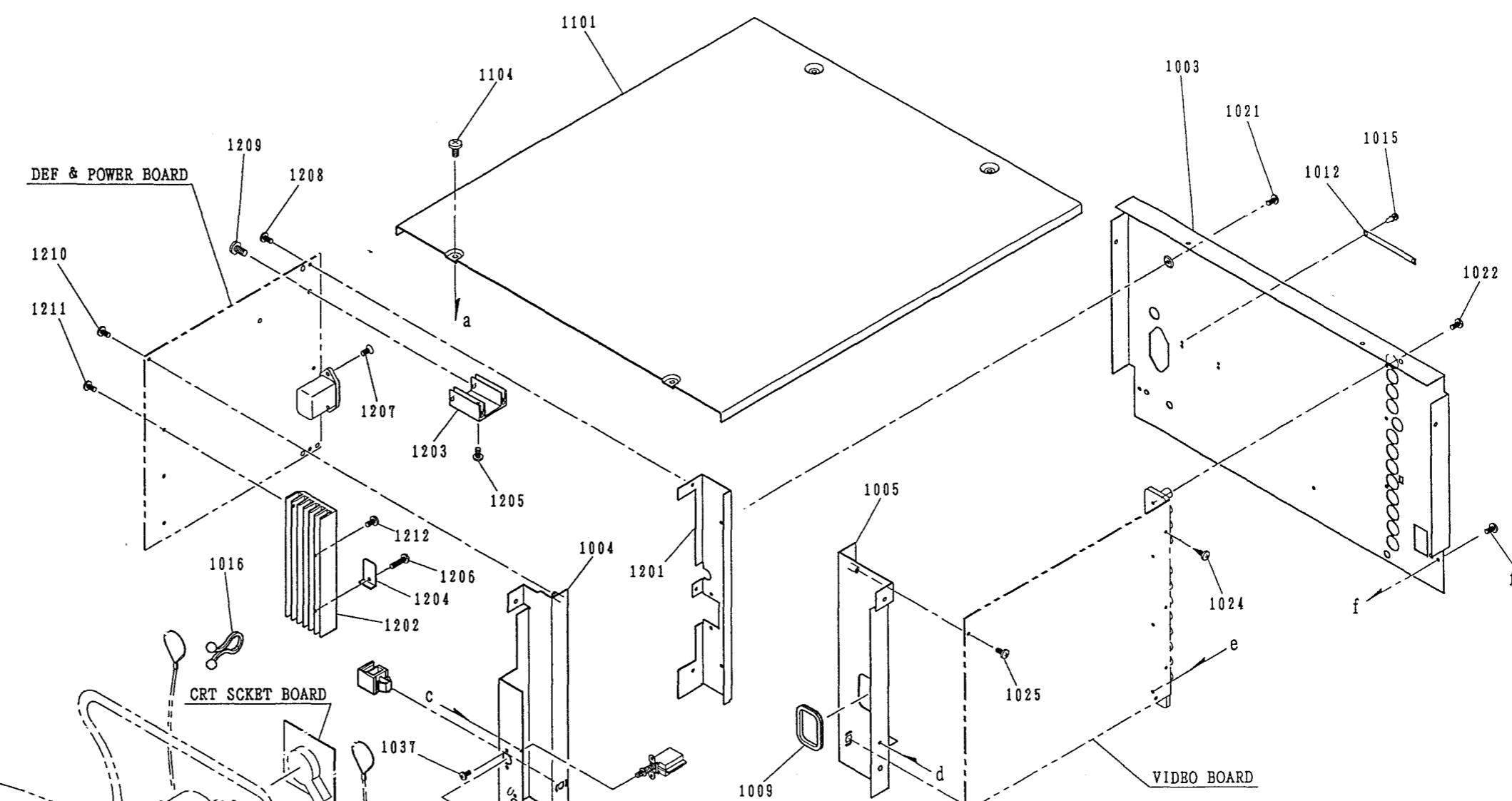


E

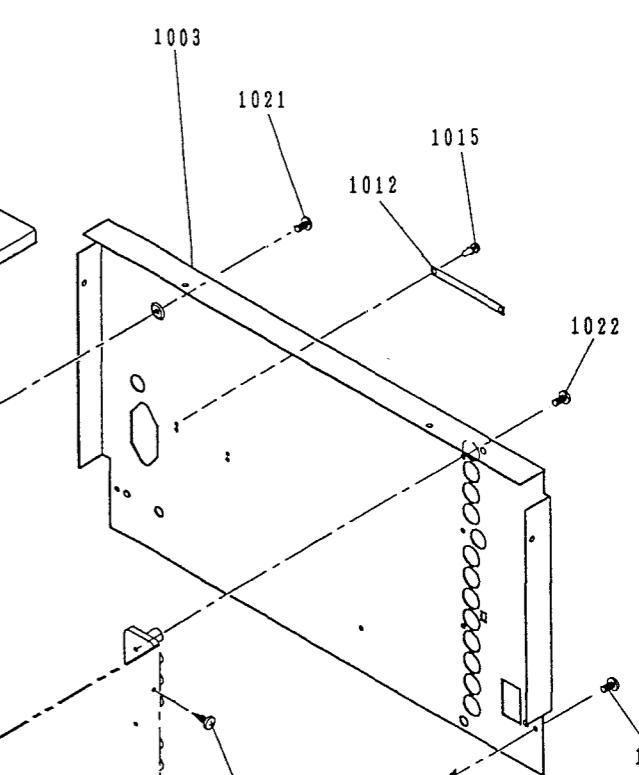


FRONT RIGHT
K3-950163

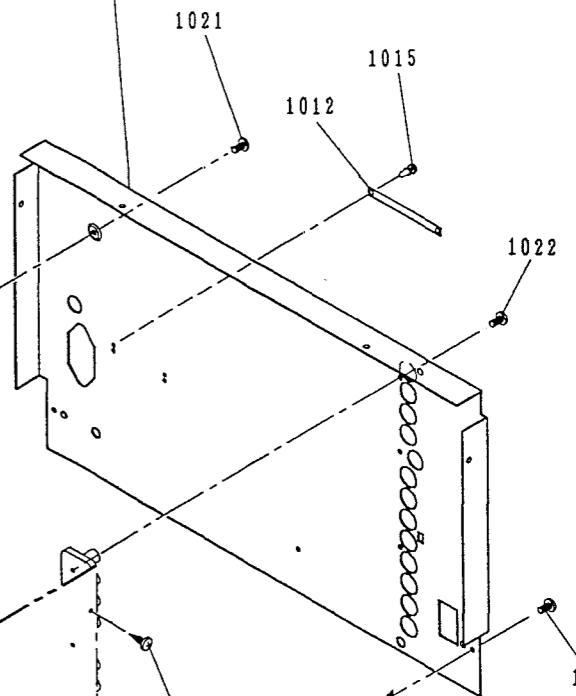
F



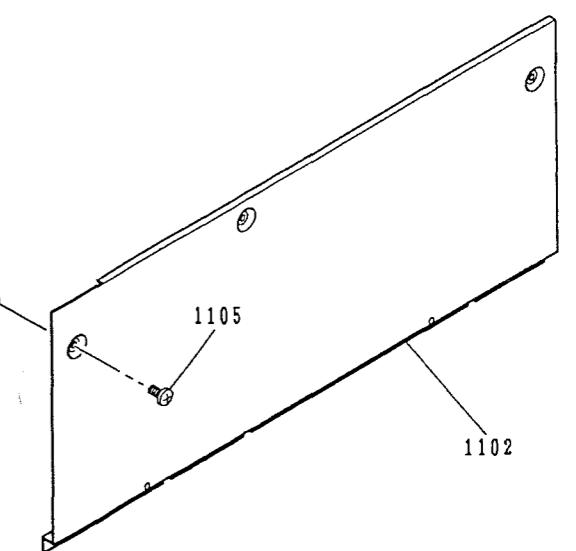
A



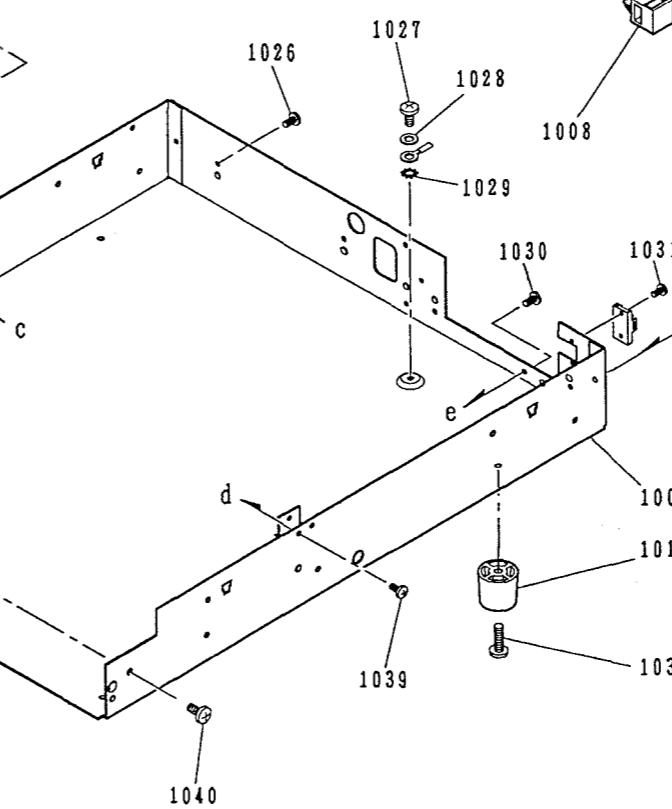
B



C



D



E

17 SERIES
TM14-17R
COLOR MONITOR
BODY(2/2)
K3-950162(2/2)

IKEGAMI TSUSHINKI CO, LTD

1

2

3

4

5

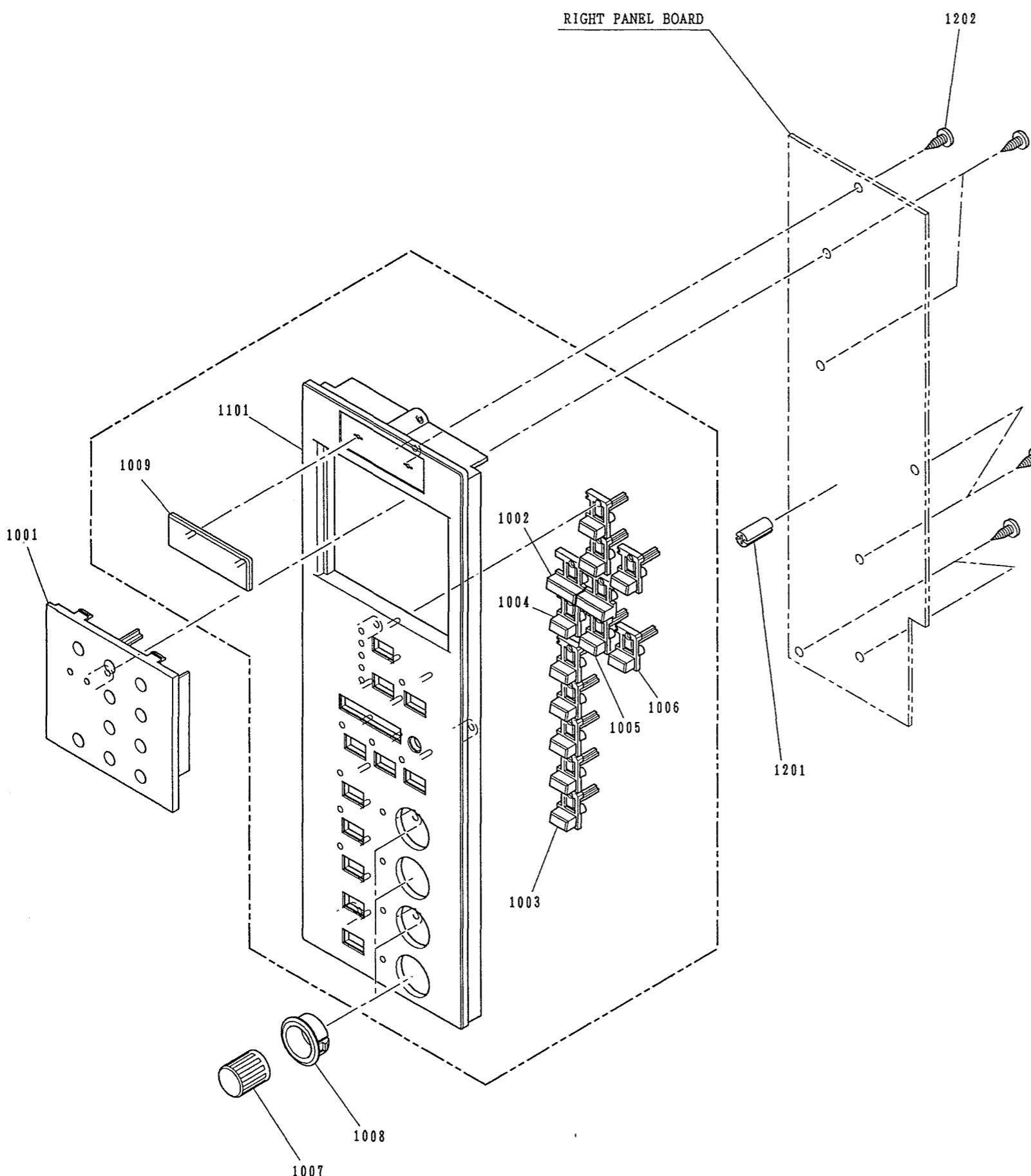
6

7

8

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

A



B

RIGHT PANEL (1)

PM-950214 94058-20120

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1001	1-C	INDICATION PLATE	M2-951002	A:1
1002	3-C	BUTTON (1)	M2-950111	1
1003	3-E	BUTTON (3)	M3-950113	8
1004	3-C	BUTTON (R)	M3-950113R	1
1005	3-D	BUTTON (G)	M3-950113G	1
1006	4-D	BUTTON (B)	M3-950113B	1
1007	2-F	VR KNOB	M3-950094	4
1008	2-F	VR GUIDO	M3-950095	4
1009	1-C	MODEL PLATE	M4-950117F	1

A

RIGHT PANEL (2)

PM-950215 94058-20130

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1101	2-C	RIGHT PANEL	M0-950207A	1

B

FRONT RIGHT BOARD PARTS

PM-950217 94058-20210

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1201	4-D	LED SPACER	LH-5-10	18
1202	5-A	SCREW	BNT3-10	7

C

17 SERIES
TM14-17R
COLOR MONITOR
RIGHT PANEL
K3-950163

IKEGAMI TSUSHINKI CO, LTD

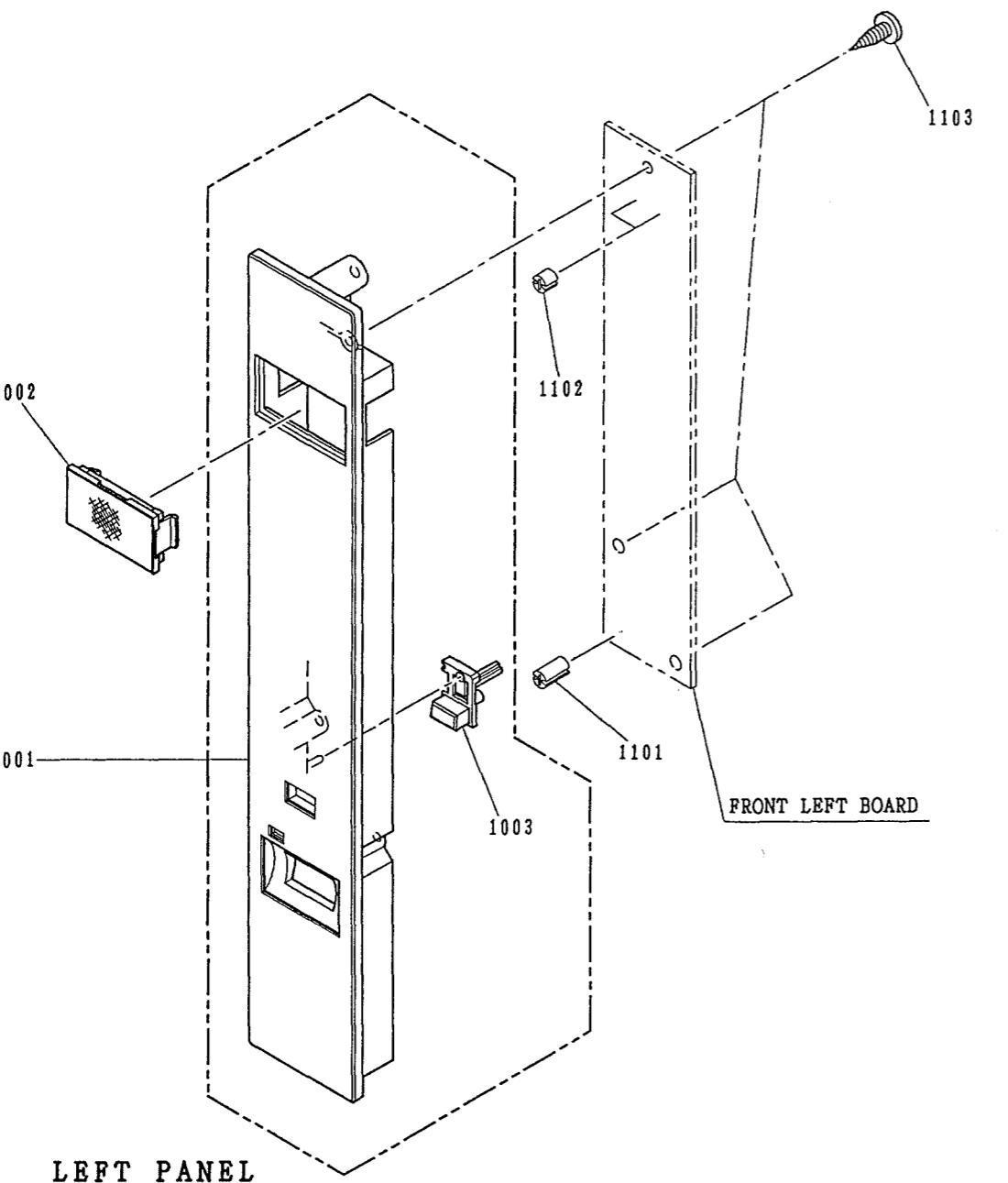
M/P-F

1 | 2 | 3 | 4 | 5 | 6

F

1 | 2 | 3 | 4

A



A

B

C

D

E

F

LEFT PANEL

PM-950213 94058-20110

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1001	1-C	LEFT PANEL	M1-950204	1
1002	1-B	TALLY (B)	M3-913869	1
1003	2-C	BUTTON (3)	M3-950113	1

FRONT LEFT BOARD PARTS

PM-950245 94058-20200

No.	INDEX	PARTS NAME	PARTS No.	Q'ty
1101	3-C	LED SPACER	LH-5-8	1
1102	3-B	LED SPACER	LH-5-4	2
1103	4-A	SCREW	BNT3-10	3

17 SERIES
TM14-17R
COLOR MONITOR
LEFT PANEL
K4-950164

IKEGAMI TSUSHINKI CO. LTD

BODY 1 (STANDARD)

PM-950210 94058-20140

No.	INDEX	PARTS NAME	PARTS No.	Q' ty
1001	1-E	ESCUOTHEON	M0-950063A	1
1002	6-E	CHASSIS	M1-950943	1
1003	7-A	REAR COVER	M1-951081	1
1004	5-C	LEFT BRACKET	M2-950939	1
1005	6-C	RIGHT BRACKET	M2-950940	1
1006	4-D	POWER BUTTON	M3-917616	1
1007	4-D	SW ADAPTER	M3-950206	1
1008	6-D	PCB HOLDER	M3-908268	2
1009	5-D	BUSHING BTYPY	M3-916296	1
1010	6-E	MONITOR FOOT	M4-908267	4
1011	4-B	EARTH SPRING	M4-279433A	2
1012	3-E	EARTH RAG	M4-910974	2
1013	2-E	TALLY	M4-912378	1
1014	8-A	BLANK PANEL (2)	M4-950686	1
1015	1-D	NAME PLATE	D45	1
1016	2-E	ESCUOTHEON PACKING	KG-CR5754 (2.2m)	1
1017	8-A	PUSH RIVET	P2632	4
1018	3-C	PURSE LOCK	NQ 62	4
1019	3-E	CRT WASHER	A5052P-H34-t 1.2	4
1020	3-E	CRT WASHER	A5052P-H34-t 2.0	4
1021	7-A	SCREW	NMB3-6	1
1022	8-B	SCREW	NMB3-6	3
1023	8-C	SCREW	NMB3-6	3
1024	7-C	SCREW	BNT3-10	3
1025	6-C	SCREW	NMB3-6	1
1026	5-D	SCREW	NMB3-6	1
1027	6-D	SCREW	NMB4-6	1
1028	6-D	WASHER	HW4	1
1029	6-D	WASHER	TW4	1
1030	6-E	SCREW	NMB3-6	1
1031	6-E	SCREW	NM2.6-10	2
1032	4-E	SCREW	NMB3-6	1
1033	4-B	SCREW	NMB4-8	2
1034	3-E	SCREW	NM6-16	4
1035	3-E	WASHER	SW6	4
1036	3-E	WASHER	HW6	4
1037	3-F	SCREW	NMB3-10	1
1038	4-D	SCREW	NMB3-6	2
1039	6-F	SCREW	NMB4-16	4
1040	6-F	SCREW	NMB3-6	1
1041	5-F	SCREW	NMB4-8	2

BODY (COVER)

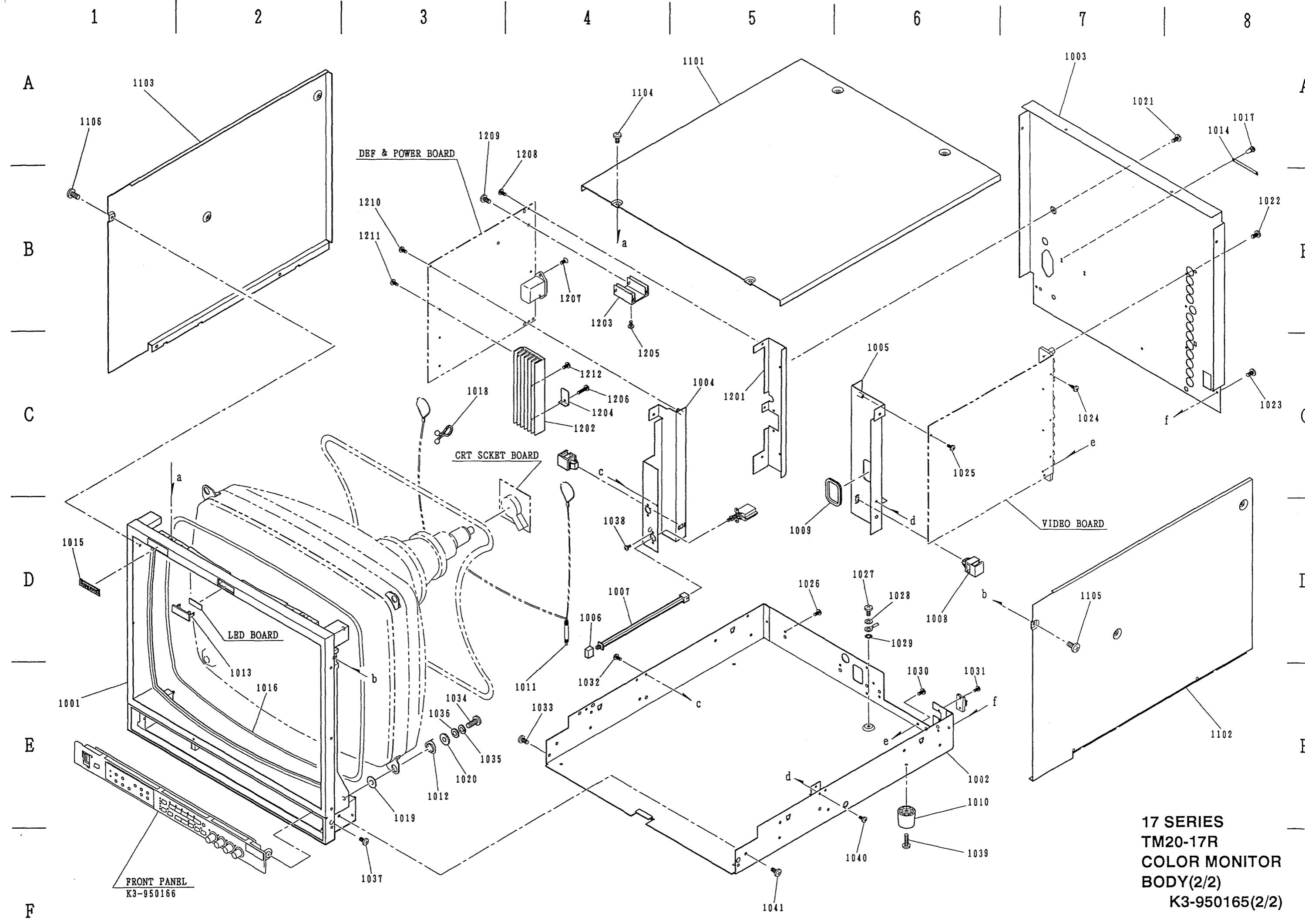
PM-950212 94058-20170

No.	INDEX	PARTS NAME	PARTS No.	Q' ty
1101	5-A	TOP COVER	M2-951078	1
1102	8-E	SIDE COVER	M2-951102	A:1
1103	1-A	SIDE COVER	M2-951102	B:1
1104	4-A	SCREW	NMB4-6	4
1105	7-D	SCREW	NMB4-6	5
1106	1-A	SCREW	NMB4-6	5

DEF & POWER BOARD PARTS

PM-950222 94058-20190

No.	INDEX	PARTS NAME	PARTS No.	Q' ty
1201	5-C	INLET METAL	M2-950941	1
1202	4-C	D&P HEAT SINK	M3-951107	1
1203	4-B	HEAT SINK B	M4-910327	2
1204	4-C	TR HOLDER	M4-920627	1
1205	4-C	SCREW	NMB3-6	2
1206	4-C	SCREW	NMB3-12	1
1207	4-B	SCREW	MM3-8	2
1208	4-A	SCREW	NMB3-6	3
1209	3-A	SCREW	NMB4-6	2
1210	3-B	SCREW	NMB3-6	1
1211	3-B	SCREW	NMB3-6	3
1212	3-B	SCREW	NMB3-6	3

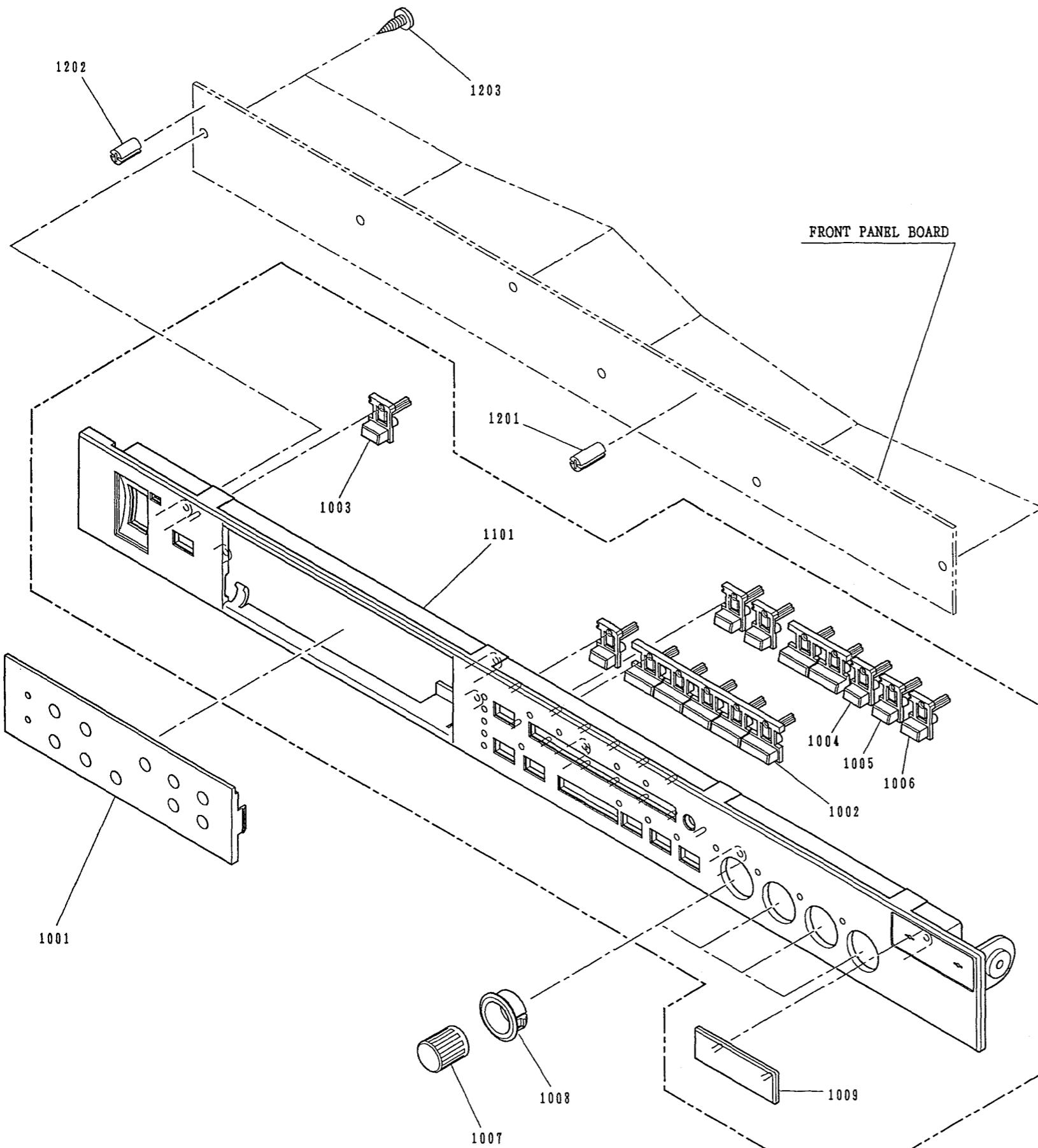


17 SERIES
TM20-17R
COLOR MONITOR
BODY(2/2)
K3-950165(2/2)

IKEGAMI TSUSHINKI CO. LTD

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

A



B

FRONT PANEL (1)

PM-950218 94058-20150

No.	INDEX	PARTS NAME	PARTS No.
1001	1-E	INDICATION PLATE	M2-951003
1002	4-D	BUTTON (1)	M2-950111
1003	2-C	BUTTON (3)	M3-950113
1004	4-D	BUTTON (R)	M3-950113R
1005	4-D	BUTTON (G)	M3-950113G
1006	5-D	BUTTON (B)	M3-950113B
1007	3-F	VR KNOB	M3-950094
1008	3-E	VR GUIDO	M3-950095
1009	4-E	MODEL PLATE	M4-950117G

Q'ty
A : 1
2
4
1
1
1
4
4
1

A

FRONT PANEL (2)

PM-950219 94058-20160

No.	INDEX	PARTS NAME	PARTS No.
1101	3-C	FRONT PANEL	M1-950212A

Q'ty
1

B

FRONT BOARD PARTS

PM-950221 94058-20180

No.	INDEX	PARTS NAME	PARTS No.
1201	3-C	LED SPACER	LH-5-10
1202	1-A	LED SPACER	LH-5-8
1203	3-A	SCREW	BNT3-10

Q'ty
18
1
6

C

C

D

D

E

E

M/P-10

17 SERIES
TM20-17R
COLOR MONITOR
FRONT PANEL
K3-950166

IKEGAMI TSUSHINKI CO. LTD

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

**TM14-17R
TM20-17R
COLOR MONITOR**

Service Manual

First printed : Sep. 1993

Published in Ikegami Tsushinki Co., Ltd.
© 1993 Ikegami Tsushinki Co., Ltd.

- All rights reserved. Reproduction or duplication, without permission of Ikegami Tsushinki Co., Ltd. of editorial or pictorial content in whole or in part, in any manner, is prohibited.
- Specifications and design are subject to change without prior notice.

Ikegami

Ikegami Tsushinki Co., Ltd.

5-6-16, Ikegami, Ohta-ku, Tokyo, 146 Japan

Phone : (03)5700-1111, Telex : 2466738 IKETSU J, Fax : (03)5700-1160

■Ikegami Electronics (U.S.A.), Inc.

37 Brook Avenue, Maywood, New Jersey 07607, U.S.A.

Phone : (201)368-9171, Telex : 219034 ITCNJ UR, Fax : (201)569-1626

■Ikegami Electronics (Europe) GmbH

Ikegami Strasse 1, 41460 Neuss 1, F.R. Germany

Phone : (02131)123-0, Telex : 17-2131365= IKE, Fax : (02131)102820

Property of :